

State of California
The Resources Agency

DEPARTMENT OF WATER RESOURCES
Division of Operations and Maintenance

STATE WATER PROJECT OPERATIONS DATA

For the month of:
March 2003

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Governor
State of California

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Secretary for Resources
The Resources Agency

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Director
Department of Water Resource

State of California
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The organization shown above represents staff and positions relevant to this report as of publication date on September 24, 2003. It is the department's policy to not show staff in "Acting" or "Temporary" positions.

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MONTHLY HIGHLIGHTS

The following highlights are activities or actions that impacted State Water Project operations during the month of March 2003.

Statewide precipitation was 100 percent of average for the 2002-2003 water year as of March 31. Statewide runoff was 95 percent of average for the water year. Precipitation percentages are used in this report to express historical and regional comparisons. Additional and more specific information is available via the internet at: "http://cdec.water.ca.gov/snow_rain.html".

Total storage in major SWP reservoirs on March 31 was about 4.25 MAF, compared with about 4.11 MAF at this time in 2002. Average storage in the major SWP reservoirs on March 31 was about 4.33 MAF. End of month storage at Lake Oroville was about 2.62 MAF as compared to 2.41 MAF last year. The State's share of San Luis Reservoir storage was about 986 TAF, as compared with 1.07 MAF at this time last year. End of month combined storage in our southern reservoirs was about 636 TAF, compared with about 625 TAF at this time last year.

Through March, SWP water deliveries for 2003 were about 555 TAF. This is a combination of project, transfer, and exchange waters. This is 23 TAF more than that delivered during the same period in 2002.

Repairs to Alamo Unit #1 continued throughout March 2003. The unit was forced out of service on January 17, 2003 with subsequent inspection discovering failure of pole ground wall insulation causing a generator terminal short to ground. Deliveries into the East Branch continue through Cottonwood Chute with no curtailment of demands.

Table 1. Antelope Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 22,566 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow 1/	
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Feb 28	4995.58	17,038								
1	4995.62	17,070	32	5	0	0	0			
2	4995.66	17,102	32	5	0	0	0			
3	4995.69	17,125	23	5	0	0	0			
4	4995.74	17,165	40	5	0	0	0			
5	4995.77	17,189	24	5	0	0	0			
6	4995.80	17,213	24	5	0	0	0			
7	4995.84	17,244	31	5	0	0	0			
8	4995.89	17,284	40	5	0	0	0			
9	4995.94	17,324	40	5	0	0	0			
10	4996.00	17,372	48	5	0	0	0			
11	4996.09	17,444	72	5	0	0	0			
12	4996.20	17,532	88	5	0	0	0			
13	4996.36	17,661	129	5	0	0	0			
14	4996.75	17,977	316	5	0	0	0			
15	4997.10	18,264	287	5	0	0	0			
16	4997.30	18,429	165	5	0	0	0			
17	4997.46	18,562	133	5	0	0	0			
18	4997.60	18,678	116	5	0	0	0			
19	4997.72	18,779	101	5	0	0	0			
20	4997.84	18,879	100	5	0	0	0			
21	4997.95	18,972	93	5	0	0	0			
22	4998.08	19,081	109	5	0	0	0			
23	4998.28	19,251	170	5	0	0	0			
24	4998.46	19,404	153	5	0	0	0			
25	4998.62	19,541	137	5	0	0	0			
26	4999.22	20,059	518	5	0	0	0			
27	4999.56	20,356	297	5	0	0	0			
28	4999.78	20,550	194	5	0	0	0			
29	4999.99	20,736	186	5	0	0	0			
30	5000.21	20,939	203	5	0	0	0			
31	5000.46	21,161	222	5	0	0	0			
Total cfs-days			---	155	0	0	0	51	206	2,285
Total ac-ft			4,123	307	0	0	0	101	408	4,531

1/ Values not available on a daily basis.

Table 2. Frenchman Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 55,477 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow 1/	
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Feb 28	5565.57	26,713								
1	5565.53	26,671	-42	2	0	0	0			
2	5565.57	26,173	-498	2	0	0	0			
3	5565.67	26,813	640	2	0	0	0			
4	5565.62	26,763	-50	2	0	0	0			
5	5565.70	26,844	81	2	0	0	0			
6	5565.79	26,934	90	2	0	0	0			
7	5565.72	26,864	-70	2	0	0	0			
8	5565.82	26,964	100	2	0	0	0			
9	5565.81	26,954	-10	2	0	0	0			
10	5565.84	26,984	30	2	0	0	0			
11	5565.97	27,115	131	2	0	0	0			
12	5565.97	27,115	0	2	0	0	0			
13	5566.00	27,146	31	2	0	0	0			
14	5566.15	27,297	151	2	0	0	0			
15	5566.55	27,704	407	2	0	0	0			
16	5566.66	27,817	113	2	0	0	0			
17	5566.69	27,847	30	2	0	0	0			
18	5566.88	28,042	195	2	0	0	0			
19	5566.96	28,125	83	2	0	0	0			
20	5567.01	28,176	51	2	0	0	0			
21	5567.02	28,187	11	2	0	0	0			
22	5567.14	28,311	124	2	0	0	0			
23	5567.27	28,445	134	2	0	0	0			
24	5567.34	28,518	73	2	0	0	0			
25	5567.46	28,643	125	2	0	0	0			
26	5567.63	28,820	177	2	0	0	0			
27	5567.77	28,966	146	2	0	0	0			
28	5567.92	29,124	158	2	0	0	0			
29	5567.94	29,145	21	2	0	0	0			
30	5568.01	29,222	77	2	0	0	0			
31	5568.15	29,370	148	2	0	0	0			
Total cfs-days			---	62	0	0	0	62	124	
Total ac-ft			2,657	123	0	0	0	123	246	
									1,464	
									2,903	

1/ Values not available on a daily basis.

Table 3. Lake Davis

Daily Operation
(in acre-feet except as noted)

Capacity: 84,371 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow 1/	
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/	Total Outflow 1/		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Feb 28	5763.99	46,325									
1	5763.99	46,325	0	10	0	0	0				
2	5763.99	46,325	0	10	0	0	0				
3	5763.99	46,325	0	10	0	0	0				
4	5763.99	46,325	0	10	0	0	0				
5	5763.99	46,325	0	10	0	0	0				
6	5763.99	46,325	0	10	0	0	0				
7	5764.00	46,354	29	10	0	0	0				
8	5764.01	46,382	28	10	0	0	0				
9	5764.03	46,440	58	10	0	0	0				
10	5764.05	46,498	58	10	0	0	0				
11	5764.11	46,671	173	10	0	0	0				
12	5764.16	46,816	145	10	0	0	0				
13	5764.19	46,903	87	10	0	0	0				
14	5764.40	47,514	611	10	0	0	0				
15	5764.68	48,336	822	10	0	0	0				
16	5764.74	48,514	178	10	0	0	0				
17	5764.78	48,632	118	10	0	0	0				
18	5764.82	48,750	118	10	0	0	0				
19	5764.85	48,840	90	10	0	0	0				
20	5764.90	48,988	148	10	0	0	0				
21	5764.95	49,137	149	10	0	0	0				
22	5764.98	49,226	89	10	0	0	0				
23	5765.06	49,467	241	10	0	0	0				
24	5765.11	49,616	149	10	0	0	0				
25	5765.14	49,706	90	10	0	0	0				
26	5765.26	50,065	359	10	0	0	0				
27	5765.30	50,186	121	10	0	0	0				
28	5765.32	50,246	60	10	0	0	0				
29	5765.37	50,397	151	10	0	0	0				
30	5765.41	50,517	120	10	0	0	0				
31	5765.43	50,578	61	10	0	0	0				
Total cfs-days				---	310	0	0	0	178	488	2,633
Total ac-ft				4,253	615	0	0	0	354	969	5,222

1/ Values not available on a daily basis.

Table 4. Lake Oroville

Daily Operation

(in acre-feet except as noted)

Capacity: 3,537,580 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow					Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal	Evaporation 2/	Spill	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 3/
Feb 28	805.96	2,259,701								
	1 806.08	2,261,084	1,383	7,314	0	62	0	7,376	0	8,759
	2 806.82	2,269,627	8,543	2,608	0	137	0	2,745	0	11,288
	3 807.05	2,272,287	2,660	5,683	0	19	0	5,702	0	8,362
	4 807.27	2,274,834	2,547	5,699	0	119	0	5,818	0	8,365
	5 807.32	2,275,413	579	7,159	0	94	0	7,253	0	7,832
	6 807.58	2,278,425	3,012	4,211	0	75	0	4,286	0	7,298
	7 807.94	2,282,600	4,175	2,792	0	82	0	2,874	0	7,049
	8 808.42	2,288,176	5,576	909	0	101	0	1,010	0	6,586
	9 808.73	2,291,782	3,606	1,576	0	76	0	1,652	0	5,258
	10 809.33	2,298,772	6,990	757	0	57	0	814	0	7,804
	11 809.90	2,305,427	6,655	651	0	69	0	720	0	7,375
	12 810.36	2,310,807	5,380	1,863	0	82	0	1,945	0	7,325
	13 810.72	2,315,024	4,217	4,104	0	95	0	4,199	0	8,416
	14 812.09	2,331,120	16,096	4,249	0	57	0	4,306	0	20,402
	15 816.39	2,382,144	51,024	250	0	64	0	314	805	50,533
	16 819.21	2,416,023	33,879	593	0	72	0	665	0	34,544
	17 820.91	2,436,615	20,592	2,976	0	33	0	3,009	0	23,601
	18 822.23	2,452,693	16,078	3,172	0	127	0	3,299	0	19,377
	19 823.32	2,466,026	13,333	2,969	0	139	0	3,108	0	16,441
	20 824.20	2,476,828	10,802	4,156	0	73	0	4,229	0	15,031
	21 825.08	2,487,662	10,834	2,541	0	100	0	2,641	0	13,475
	22 825.84	2,497,046	9,384	4,384	0	87	0	4,471	0	13,855
	23 827.55	2,518,250	21,204	371	0	47	0	418	2,601	19,021
	24 828.74	2,533,080	14,830	65	0	27	0	92	3,756	11,166
	25 829.24	2,539,330	6,250	2,983	0	135	0	3,118	2,002	7,366
	26 830.79	2,558,772	19,442	2,867	0	68	0	2,935	2,273	20,104
	27 832.23	2,576,927	18,155	3,786	0	102	0	3,888	2,229	19,814
	28 833.38	2,591,491	14,564	2,536	0	206	0	2,742	9	17,297
	29 834.47	2,605,347	13,856	2,113	0	227	0	2,340	0	16,196
	30 835.87	2,623,221	17,874	1,083	0	145	0	1,228	4,569	14,533
	31 836.76	2,634,628	11,407	3,311	0	118	0	3,429	0	14,836
Total				374,927	89,731	0	2,895	0	92,626	18,244
1/ Includes bypass flows										
2/ Evaporation will be zero for days when there is precipitation or heavy overcast										
3/ Does not include pumpback										

1/ Includes bypass flows

2/ Evaporation will be zero for days when there is precipitation or heavy overcast

3/ Does not include pumpback

**Table 5. Thermalito Forebay
Including Diversion Pool and Power Canal**

Capacity: 25,120 ac-ft

Daily Operation
(in acre-feet except as noted)

March 2003

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County	Thermalito Irrigation District	Releases To River 4/	Hyatt Powerplant Pumpback	
Feb 28	23,879										
1	23,979	100	7,314	508	0	6,610	3	3	1,250	0	144
2	24,059	80	2,608	502	0	1,868	3	4	1,243	0	88
3	23,954	-105	5,683	510	0	5,046	3	4	1,255	0	10
4	23,642	-312	5,699	541	0	5,320	3	4	1,255	0	30
5	23,357	-285	7,159	486	0	6,782	3	4	1,256	0	115
6	23,889	532	4,211	510	0	2,996	3	4	1,264	0	78
7	24,476	587	2,792	510	0	1,470	3	4	1,248	0	10
8	24,489	13	909	506	0	0	3	4	1,247	0	-148
9	23,830	-659	1,576	510	0	1,510	3	4	1,253	0	25
10	23,754	-76	757	512	0	90	3	4	1,255	0	7
11	23,558	-196	651	510	0	94	3	4	1,252	0	-4
12	23,951	393	1,863	615	0	789	3	4	1,247	0	-42
13	23,848	-103	4,104	506	0	3,586	3	4	1,253	0	133
14	23,887	39	4,249	507	0	3,738	3	4	1,258	0	286
15	24,187	300	250	506	1,337	87	3	4	1,261	805	367
16	23,874	-313	593	507	0	224	3	4	1,255	0	73
17	24,427	553	2,976	508	0	1,676	3	4	1,249	0	1
18	24,593	166	3,172	506	0	2,286	4	4	1,265	0	47
19	24,235	-358	2,969	518	0	2,646	4	4	1,253	0	62
20	24,359	124	4,156	498	0	3,324	4	4	1,255	0	57
21	23,695	-664	2,541	502	0	2,474	4	4	1,255	0	30
22	23,678	-17	4,384	508	0	3,756	4	4	1,253	0	108
23	24,278	600	371	508	3,678	79	4	4	1,253	2,601	-16
24	23,873	-405	65	502	4,126	78	4	4	1,251	3,756	-5
25	23,855	-18	2,983	484	1,900	1,983	4	4	1,247	2,002	-145
26	24,082	227	2,867	514	2,256	1,973	4	4	1,253	2,273	97
27	24,205	123	3,786	484	2,188	2,912	4	4	1,249	2,229	63
28	24,020	-185	2,536	484	0	1,966	4	4	1,241	9	19
29	24,263	243	2,113	480	0	1,213	4	4	1,236	0	107
30	24,222	-41	1,083	500	4,630	441	4	4	1,234	4,569	-2
31	23,712	-510	3,311	508	0	3,022	4	4	1,234	0	-65
Total		-167	89,731	15,750	20,115	70,039	107	123	38,780	18,244	1,530

1/ Sum of Thermalito Forebay and Diversion Pool.

2/ Sum of generation and bypass flows through Hyatt plant, and spill.

3/ Includes Bypass flows at Thermalito.

4/ The sum of the flows from fish barrier dam and the fish hatchery.

Table 6. Thermalito Afterbay

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow					Losses (-) and Gains (+)	Total Releases to River 2/
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback		
Feb 28	130.01	32,185										
1	130.42	33,562	1,377	6,610	0	0	0	0	4,979	0	-254	6,229
2	129.78	31,424	-2,138	1,868	0	0	0	0	3,987	0	-19	5,230
3	130.21	32,853	1,429	5,046	0	0	0	0	3,312	0	-305	4,567
4	130.82	34,931	2,078	5,320	0	0	0	0	2,936	0	-306	4,191
5	131.94	38,901	3,970	6,782	0	0	0	0	2,539	0	-273	3,795
6	132.13	39,595	694	2,996	0	0	0	0	2,142	0	-160	3,406
7	131.99	39,083	-512	1,470	0	0	0	0	1,745	0	-237	2,993
8	131.65	37,854	-1,229	0	0	0	0	0	1,351	0	122	2,598
9	131.63	37,782	-72	1,510	0	0	0	0	1,250	0	-332	2,503
10	131.34	36,750	-1,032	90	0	0	0	0	1,256	0	134	2,511
11	131.08	35,835	-915	94	0	0	0	0	958	0	-51	2,210
12	131.00	35,556	-279	789	0	0	0	0	887	0	-181	2,134
13	131.76	38,250	2,694	3,586	0	0	0	0	899	0	7	2,152
14	132.63	41,446	3,196	3,738	0	0	0	0	867	0	325	2,125
15	132.13	39,595	-1,851	87	0	0	0	0	853	1,337	252	2,114
16	131.94	38,901	-694	224	0	0	0	0	845	0	-73	2,100
17	132.13	39,595	694	1,676	0	0	0	0	843	0	-139	2,092
18	132.48	40,887	1,292	2,286	0	0	0	0	859	0	-135	2,124
19	132.98	42,766	1,879	2,646	0	0	0	0	865	0	98	2,118
20	133.55	44,956	2,190	3,324	0	0	0	0	847	0	-287	2,102
21	133.98	46,642	1,686	2,474	0	0	0	0	859	0	71	2,114
22	134.71	49,558	2,916	3,756	0	0	0	0	859	0	19	2,112
23	133.59	45,112	-4,446	79	0	0	0	0	845	3,678	-2	2,098
24	132.29	40,183	-4,929	78	0	0	0	0	848	4,126	-33	2,099
25	132.15	39,668	-515	1,983	0	0	0	0	850	1,900	252	2,097
26	131.77	38,286	-1,382	1,973	0	0	0	0	859	2,256	-240	2,112
27	131.70	38,034	-252	2,912	0	0	0	0	853	2,188	-123	2,102
28	131.95	38,938	904	1,966	0	0	0	0	848	0	-214	2,089
29	132.03	39,229	291	1,213	0	0	0	0	861	0	-61	2,097
30	130.62	34,243	-4,986	441	0	0	0	0	848	4,630	51	2,082
31	131.23	36,361	2,118	3,022	0	0	0	0	843	0	-61	2,077
Total				4,176	70,039	0	0	0	43,593	20,115	-2,155	82,373

1/ Includes Bypass flows at Thermalito.

2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

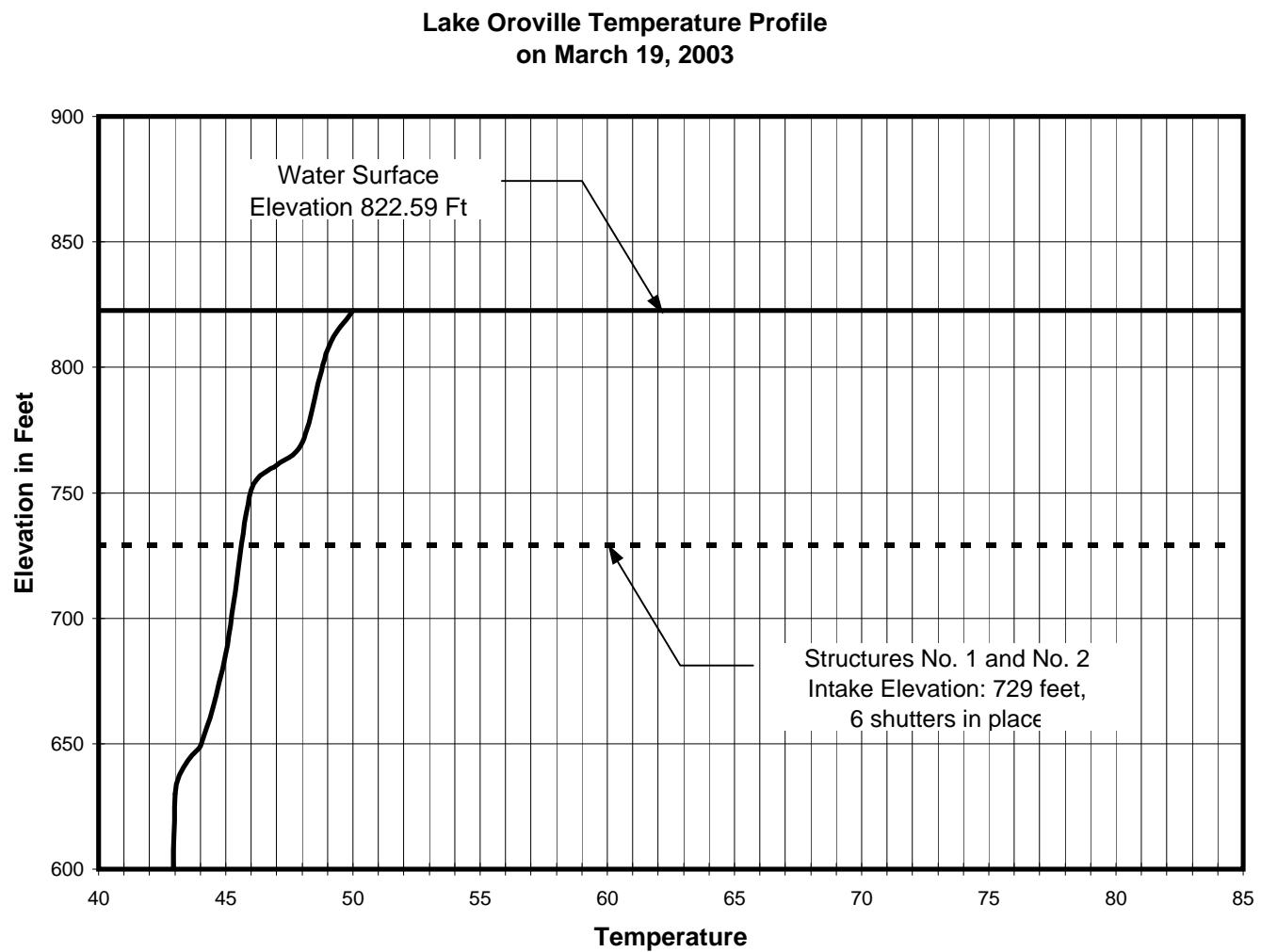
Table 7. Oroville-Thermalito Complex

Water Temperature Data

(in degrees Fahrenheit)

March 2003

Date	Mean Daily Temperature	
	Thermalito Afterbay Outlet	Fish Hatchery
1	49	47
2	49	47
3	49	48
4	49	47
5	50	47
6	50	48
7	51	48
8	51	48
9	52	48
10	54	48
11	53	48
12	53	48
13	54	48
14	55	48
15	55	48
16	55	48
17	56	48
18	56	48
19	56	48
20	56	49
21	57	48
22	56	48
23	58	48
24	58	51
25	58	52
26	58	52
27	59	52
28	58	52
29	58	52
30	58	54
31	59	54



Note: Water surface elevations on Table 4 are taken at Oroville Dam at midnight and may differ slightly from those shown on this table which are normally taken at mid-day and upstream from Oroville Dam.

Table 8. North Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					Table A Amount			Table A Special Carryover		
	No.	Structure	Mile			M & I	Benicia	Vallejo			
1	1	Barker Slough Pumping Plant	0.17	(Into the North Bay Aqueduct)	2,053	127	100	730	376		
		Travis Surge Tank	8.78								
		10.54	8.80	Solano County Water Agency Travis Turnout	127						
			10.54	Solano County Water Agency Fairfield / Vacaville 24"	0						
				Solano County Water Agency Fairfield / Vacaville 42"	0						
	3A		17.00	Solano County Water Agency Central Solano	Stub						
		Cordelia Forebay	21.23								
		Cordelia Pumping Plant & Cordelia Spillway	21.30		1,760						
		Napa Pipeline	21.33	Solano County Water Agency Vallejo	0						
				Solano County Water Agency Benicia	830						
3B	2	Cordelia Surge Tank	23.33			384	170	376			
		Creston Surge Tank Connection	25.65								
		26.95	Napa County Flood Control & WCD American Canyon 2		0						
			27.27	Napa County Flood Control & WCD American Canyon 3	0						
		Napa Terminal Tank	27.58	City of Napa	760						
			27.60	Napa County Flood Control & WCD American Canyon 1	170						

Table 9. Delta Field Division Plant Data

(in acre-feet)

March 2003

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct			
	Barker Slough Pumping Plant	Cordelia Pumping Plant	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant		
			Total	SWP		Into Lake	Into Aqueduct	Gravity Flow Through Plant Into Aqueduct
1	61	58	15,065	15,065	358	0	0	50
2	59	59	14,260	14,260	358	0	0	50
3	66	60	14,258	14,258	358	0	0	60
4	66	50	14,334	14,334	403	0	0	29
5	59	54	14,236	14,236	415	0	0	0
6	60	55	14,307	14,307	419	0	0	0
7	72	60	14,155	14,155	431	0	0	0
8	62	59	11,731	11,731	417	0	0	0
9	63	54	10,794	10,794	426	0	0	0
10	65	59	10,623	10,623	409	0	0	0
11	70	61	8,475	8,475	365	0	0	0
12	69	61	12,102	12,102	402	58	0	0
13	71	59	11,820	11,820	492	173	0	0
14	68	57	11,028	11,028	493	188	0	0
15	63	56	10,463	10,463	492	179	0	0
16	53	50	9,606	9,606	506	179	0	0
17	68	48	12,843	12,843	517	169	0	0
18	62	55	13,164	13,164	534	179	0	0
19	75	59	12,921	12,921	519	179	0	0
20	63	53	12,836	12,836	512	169	0	0
21	69	58	12,215	12,215	506	169	0	0
22	62	49	10,037	10,037	506	159	0	0
23	56	51	13,392	13,392	506	159	0	0
24	69	57	12,922	12,922	515	159	0	0
25	71	55	12,926	12,926	516	169	0	0
26	64	51	12,884	12,884	527	159	0	0
27	73	56	12,980	12,980	512	159	0	0
28	73	56	12,841	12,841	508	129	0	0
29	68	57	11,986	11,986	506	129	0	0
30	72	72	12,851	12,851	506	129	0	0
31	81	71	10,474	10,474	503	98	0	0
Total	2,053	1,760	384,529	384,529	14,437	3,087	0	189

Table 10. Clifton Court Forebay

Daily Operation of Gates

March 2003

Date	Time								Amount of inflow in Acre-Feet
	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	
1	2:15	13:45	16:15	23:30					14,397
2	2:40	14:45	17:00	23:59					13,959
3	3:00	15:30	17:45	22:30					14,387
4	3:15	16:15	18:30	23:30					14,334
5	0:01	0:45	3:45	17:00	19:50	---			14,559
6	---	0:45	3:45	17:00	19:50	---			14,006
7	---	1:15	4:15	14:30	17:30	---			14,565
8	---	5:30	8:30	15:30	18:30	23:12			11,775
9	0:01	6:00	9:00	16:20	19:36	---			9,761
10	---	6:45	9:30	15:30	22:00	---			10,279
11	---	7:45	10:40	15:15					8,475
12	0:01	9:00	11:15	16:10	23:40	---			12,478
13	---	10:15	12:30	18:40	23:50	---			11,929
14	---	11:30	14:30	16:30					11,304
15	0:20	12:30	15:00	16:56					10,694
16	1:55	10:50	12:30	13:15	17:04	20:10			9,907
17	0:40	2:00	11:01	13:10	14:15	23:30			13,264
18	2:30	11:52	13:58	15:15	17:45	---			12,779
19	---	0:01	3:00	11:55	15:14	16:15	18:30	23:40	13,166
20	0:01	4:15	7:00	13:15	16:15	---			13,066
21	---	4:45	7:30	14:15	17:50	---			12,311
22	---	5:15	8:15	14:55	18:30	---			9,807
23	---	6:00	8:45	15:40	19:30	---			12,325
24	---	6:45	9:30	15:27	20:25	---			12,959
25	---	7:45	10:45	16:36	22:35	---			12,033
26	---	9:15	12:00	17:20	23:25	---			13,068
27	---	10:45	13:15	18:45					12,808
28	0:02	12:00	15:00	19:40					12,562
29	1:10	13:00	15:30	18:58					12,287
30	1:15	14:00	16:15	22:00					12,292
31	1:45	14:45	17:00	19:25					10,706
Total inflow for the month in AF:									382,242

Table 11. Governor Edmund G. Brown California Aqueduct

Delta Field Division, Monthly Deliveries

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Local	Article 21 Water	Article 12E Table A Carryover		
	No.	Structure	Mile									
1	Banks Pumping Plant	3.32			384,529		62					
	South Bay Pumping Plant	4.49	Bethany Reservoir inlet		14,437							
	Check No. 1	5.95										
	Check No. 2	12.01										
		12.47	Musco Olive		62							
	Check No. 3	18.29										
		22.16	Tracy Golf & Country Club		0							
	Check No. 4	23.99										
	Check No. 5	29.73										
	Check No. 6	34.24										
		35.22	Turlock Fruit Company Inflow		0							
	Check No. 7	39.91										
2A		42.46	Oak Flat Water District-A		30		28			30		
		42.9	Western Hills WD		28							
		43.81	Oak Flat Water District-B		22							
		44.64	Oak Flat Water District-C		3							
	Check No. 8	45.97										
		46.18	Oak Flat Water District-D		74							
			Oak Flat Totals:		129							
	Check No. 9	51.3										
	Check No. 10	56.86										
	Check No. 11	61.4										
		66.14	Veteran's Cemetery		3							
	Check No. 12	66.71			347,952							
2B												

Table 12. South Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Extended Table A Carryover	Article 21 Water	Local	Recreation		
	No.	Structure	Mile									
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	14,437	394	23	1,135	189	103		
			3.17	Granite - Vasco Rd. (Temp.)	0							
			3.18	Oakland Scavenger Zone 7	0							
	2	Check No. 1	3.91									
2	3		7.21	Zone 7 Altamont	0	394	23	1,135	189	103		
		Check No. 3	9.49	Zone 7 Patterson Inflow Exchange	0							
				Zone 7 Patterson Project Water	394							
	4	Check No. 4	10.68									
4	5	Check No. 5	12.29			1,135	13	1,217	4	4		
	6		13.55	Zone 7 Wente #1	23							
			14.16	Zone 7 Wente #2	0							
			14.31	Ising Project Water	0							
	7	Check No. 6	14.65									
	7		14.78	Zone 7 Arroyo Mocho Project Water	1,135							
			16.38									
			16.57	Zone 7 Wente #3	0							
5	8		16.69	Zone 7 Norman Nursery	0	286	13	363	1,207	1,207		
			16.70	Zone 7 Concannon Project Water	0							
		Del Valle Branch Pipeline Junction	18.63	(Pumped into Lake Del Valle)	3,087							
				(Flow into South Bay Aqueduct)	189							
				Arroyo Valle #1 & #2 Inflow Released	189							
				Arroyo Valle #1 & #2 Inflow Exchange	103							
				Lake Del Valle Recreation	4							
				Zone 7 Wente #5	13							
			19.20	So. Livermore Project	1,503							
6				So. Livermore Inflow Released	0							
				So. Livermore Stored Exchanged	0							
7	La Costa Tunnel		19.21	Zone 7 - Kalthrof Detjens	0							
			22.50	ACWD Vallecitos Project Water	0							
8			25.97	City of San Francisco San Antonio	0							
		Mission Tunnel	28.97	ACWD - Bayside 1 & 2 Project Water: Inflow Released Storage Exchange:	363 0 1,207							
9	Santa Clara Pipeline	35.86		S.C.V.W.D. Meter	6,598	3,675	2,209	714				

Table 13. Lake Del Valle

Daily Operation

(in acre-feet except as noted)

Capacity: 77,106 ac-ft

March 2003

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Outflow					Precipitation (inches)
				Natural 1/	From South Bay Aqueduct	Arroyo Valle	South Bay Aqueduct	Recreation Deliveries 2/	Evaporation	Total Outflow	
Feb 28	692.72	33,055									
1	692.69	33,036	-19	33	0	0	49	0	3	52	0.00
2	692.64	33,004	-32	22	0	0	50	0	4	54	0.00
3	692.59	32,973	-31	34	0	0	60	0	5	65	0.00
4	692.57	32,961	-12	21	0	0	30	0	3	33	0.00
5	692.61	32,986	25	28	0	0	0	0	3	3	0.00
6	692.63	32,998	12	17	0	0	0	0	5	5	0.00
7	692.65	33,011	13	19	0	0	0	0	6	6	0.00
8	692.69	33,036	25	29	0	0	0	0	4	4	0.00
9	692.70	33,042	6	10	0	0	0	0	4	4	0.00
10	692.72	33,055	13	17	0	0	0	0	4	4	0.00
11	692.74	33,067	12	15	0	0	0	0	3	3	0.00
12	692.86	33,142	75	21	58	0	0	0	4	4	0.00
13	693.19	33,350	208	40	173	0	0	0	5	5	0.00
14	693.50	33,545	195	12	188	0	0	0	5	5	0.00
15	693.96	33,837	292	123	179	0	0	0	9	9	0.87
16	694.38	34,105	268	92	179	0	0	0	2	2	0.18
17	694.77	34,354	249	82	169	0	0	0	2	2	0.00
18	695.12	34,579	225	48	179	0	0	0	2	2	0.00
19	695.44	34,786	207	33	179	0	0	0	5	5	0.00
20	695.75	34,987	201	37	169	0	0	0	5	5	0.00
21	696.03	35,170	183	19	169	0	0	0	5	5	0.00
22	696.30	35,347	177	22	159	0	0	0	4	4	0.00
23	696.62	35,557	210	55	159	0	0	0	4	4	0.00
24	696.88	35,729	172	16	159	0	0	0	2	2	0.10
25	697.14	35,901	172	7	169	0	0	0	4	4	0.00
26	697.43	36,094	193	39	159	0	0	0	5	5	0.00
27	697.68	36,260	166	12	159	0	0	0	5	5	0.00
28	697.89	36,400	140	18	129	0	0	1	6	7	0.00
29	698.09	36,534	134	16	129	0	0	1	9	10	0.00
30	698.29	36,668	134	13	129	0	0	1	7	8	0.00
31	698.44	36,769	101	12	98	0	0	1	8	9	0.00
Total				3,714	961	3,087	0	189	4	141	334
											1.15

1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.

2/ To East Bay Regional Park District.

NR=No Records

Table 14. Consolidated State-Federal O'Neill Forebay

Daily Operations

March 2003

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elevation (in feet)	Storage (ac-ft)	Storage Change	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)	
				Pump In 1/	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliveries 2/		
Feb 28	220.64	44,818											
1	223.20	51,580	6,762	0	2,132	1,334	6,704	0	3,682	4,138	10	1,069	
2	221.07	45,944	-5,636	0	2,240	0	6,573	0	6,210	5,776	10	342	
3	223.11	51,340	5,396	0	2,293	0	6,181	0	2,836	3,387	10	479	
4	223.35	51,982	642	0	2,331	0	6,663	0	5,177	3,727	10	244	
5	223.24	51,687	-295	0	2,239	0	7,066	0	5,560	4,120	10	236	
6	222.50	49,713	-1,974	0	2,141	0	6,837	0	5,618	4,574	10	229	
7	222.49	49,687	-26	0	2,099	0	6,457	0	4,304	4,379	10	124	
8	222.70	50,246	559	0	2,202	0	5,435	0	2,668	4,940	11	264	
9	219.20	41,093	-9,153	0	2,386	0	4,650	0	5,600	6,307	11	267	
10	219.80	42,635	1,542	0	2,413	0	4,586	0	2,124	4,147	11	60	
11	219.30	41,349	-1,286	0	2,497	0	3,923	0	2,966	4,438	12	348	
12	219.20	41,093	-256	0	2,609	0	5,263	0	2,432	5,705	12	148	
13	220.28	43,879	2,786	0	2,777	0	5,397	0	1,971	5,008	11	221	
14	220.77	45,158	1,279	0	3,014	0	5,085	0	2,389	5,219	11	165	
15	222.55	49,847	4,689	0	3,260	1,015	4,920	0	2,542	4,722	11	444	
16	221.21	46,311	-3,536	0	3,302	0	4,735	0	5,539	4,268	11	-2	
17	223.15	51,447	5,136	0	3,113	0	5,391	0	1,970	4,020	11	86	
18	222.81	50,539	-908	0	3,066	0	6,033	0	6,205	3,586	11	245	
19	222.49	49,687	-852	0	3,040	0	5,829	0	5,638	4,025	11	375	
20	222.87	50,699	1,012	0	2,982	0	5,520	0	3,417	4,745	11	181	
21	223.55	52,518	1,819	0	2,914	0	5,840	0	3,798	4,242	11	214	
22	223.08	51,260	-1,258	0	2,918	0	4,202	0	5,475	2,508	11	240	
23	221.96	48,282	-2,978	0	2,943	0	5,805	0	7,073	3,767	11	602	
24	222.30	49,182	900	0	2,928	0	6,341	0	5,538	3,287	11	21	
25	222.33	49,261	79	0	2,811	0	5,931	0	5,184	3,694	11	187	
26	221.80	47,861	-1,400	0	2,810	0	5,825	0	4,655	4,823	11	148	
27	221.10	46,023	-1,838	0	2,849	0	5,265	0	3,231	5,998	11	199	
28	220.40	44,192	-1,831	0	2,858	0	6,392	0	2,245	7,956	11	39	
29	220.00	43,152	-1,040	0	2,961	2,275	5,882	0	1,633	10,392	12	395	
30	218.81	40,103	-3,049	0	3,001	1,053	5,917	0	2,606	8,995	12	105	
31	218.32	38,870	-1,233	0	3,067	1,583	4,775	0	1,609	8,552	12	126	
Total				-5,948	0	84,196	7,260	175,423	0	121,895	155,445	339	7,801
Mean cfs				- - -	0	2,716	234	5,659	0	3,932	5,014	11	252
Acre-feet				-5,948	0	167,000	14,398	347,952	0	241,778	308,322	673	15,475

1/ Pump-in located at Mile 79.67R.

2/ Includes 69 AF delivered to DFG at O'Neill Forebay, 1 AF to P&R Cattle, and 603 AF to San Luis Water District. The daily values are averaged to include deliveries from March 4 through March 31.

Table 15. Consolidated State-Federal San Luis Reservoir

Daily Operations

March 2003

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 2,027,835 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)	Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/ 3/	Parks and Rec. Del. 2/	
Feb 28	519.70	1,739,389						
1	520.02	1,743,246	3,857	3,682	1,334	94	0	-309
2	521.02	1,755,318	12,072	6,210	0	96	0	-28
3	521.46	1,760,638	5,320	2,836	0	96	0	-58
4	522.28	1,770,569	9,931	5,177	0	107	0	-63
5	523.16	1,781,248	10,679	5,560	0	117	0	-59
6	524.05	1,792,071	10,823	5,618	0	107	0	-54
7	524.73	1,800,355	8,284	4,304	0	52	0	-76
8	525.15	1,805,479	5,124	2,668	0	2	0	-83
9	526.05	1,816,474	10,995	5,600	0	2	0	-55
10	526.38	1,820,512	4,038	2,124	0	41	0	-47
11	526.83	1,826,023	5,511	2,966	0	137	0	-51
12	527.20	1,830,558	4,535	2,432	0	86	0	-60
13	527.48	1,833,993	3,435	1,971	0	160	0	-79
14	527.83	1,838,289	4,296	2,389	0	144	0	-79
15	528.08	1,841,361	3,072	2,542	1,015	138	0	160
16	528.94	1,851,939	10,578	5,539	0	118	0	-88
17	529.23	1,855,511	3,572	1,970	0	138	0	-31
18	530.19	1,867,352	11,841	6,205	0	140	0	-95
19	531.06	1,878,105	10,753	5,638	0	136	0	-81
20	531.57	1,884,419	6,314	3,417	0	145	0	-89
21	532.14	1,891,484	7,065	3,798	0	156	0	-80
22	532.98	1,901,912	10,428	5,475	0	157	0	-61
23	534.07	1,915,474	13,562	7,073	0	146	0	-90
24	534.92	1,926,073	10,599	5,538	0	150	0	-44
25	535.70	1,935,817	9,744	5,184	0	163	0	-108
26	536.40	1,944,576	8,759	4,655	0	166	0	-73
27	536.87	1,950,465	5,889	3,231	0	152	0	-110
28	537.17	1,954,227	3,762	2,245	0	194	0	-154
29	537.02	1,952,346	-1,881	1,633	2,275	189	0	-117
30	537.25	1,955,231	2,885	2,606	1,053	194	0	95
31	537.14	1,953,851	-1,380	1,609	1,583	231	1	-490
Total			214,462	121,895	7,260	3,954	1	-2,557
Mean cfs			---	3,932	234	128	0	-82
Acre-feet			214,462	241,778	14,398	7,842	2	-5,077

1/ Pacheco Tunnel, San Felipe Split; Santa Clara: 7,118 AF, San Benito: 724 AF. Daily values averaged to include deliveries

from March 4 through March 31.

2/ Includes 2 AF delivered to Parks and Recreation.

Table 16. San Luis Field Division Plant Data

(in acre-feet)

March 2003

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/ 2/	Total Generation	SWP Generation 1/ 2/	Total Pumping	SWP Pumping 1/ 2/	Federal
1	8,208	5,377	2,645	2,645	7,304	4,577	186
2	11,456	8,564	0	0	12,317	2,723	190
3	6,718	3,867	0	0	5,626	2,277	190
4	7,392	4,518	0	0	10,269	6,732	213
5	8,173	5,618	0	0	11,028	7,450	232
6	9,072	6,520	0	0	11,144	7,464	212
7	8,685	6,105	0	0	8,536	5,162	103
8	9,798	7,198	0	0	5,292	1,840	3
9	12,510	9,987	0	0	11,108	-65	4
10	8,225	5,730	0	0	4,213	446	82
11	8,802	6,217	0	0	5,883	1,761	271
12	11,315	8,845	0	0	4,823	259	171
13	9,934	7,435	0	0	3,909	4	317
14	10,352	7,832	0	0	4,739	89	286
15	9,366	6,843	2,013	2,013	5,043	24	274
16	8,465	6,014	0	0	10,987	880	234
17	7,974	5,437	0	0	3,908	418	273
18	7,112	4,537	0	0	12,308	8,546	277
19	7,984	5,406	0	0	11,182	7,969	270
20	9,412	7,411	0	0	6,777	2,979	288
21	8,414	6,389	0	0	7,533	4,343	309
22	4,974	2,944	0	0	10,859	7,410	312
23	7,472	5,460	0	0	14,029	6,806	290
24	6,520	4,512	0	0	10,984	7,713	298
25	7,328	5,316	0	0	10,283	7,470	323
26	9,567	6,730	0	0	9,233	6,524	329
27	11,897	9,081	0	0	6,409	4,023	302
28	15,781	12,980	0	0	4,452	2,100	385
29	20,612	17,804	4,512	4,512	3,240	45	375
30	17,841	15,078	2,089	2,089	5,169	49	385
31	16,963	14,147	3,139	3,139	3,191	-33	458
Total	308,322	229,902	14,398	14,398	241,778	107,985	7,842

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

2/ Provisional, subject to change.

Table 17. Consolidated State-Federal Los Banos Reservoir

Daily Operations

March 2003

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Feb 28	327.57	20,468					
1	327.59	20,477	9	5	0	0	-1
2	327.61	20,486	9	5	0	0	-1
3	327.63	20,496	10	5	0	0	0
4	327.64	20,501	5	3	0	0	-1
5	327.65	20,505	4	2	0	0	0
6	327.67	20,515	10	5	0	0	0
7	327.67	20,515	0	0	0	0	0
8	327.69	20,524	9	5	0	0	-1
9	327.70	20,529	5	3	0	0	-1
10	327.71	20,533	4	2	0	0	0
11	327.73	20,543	10	5	0	0	0
12	327.74	20,547	4	2	0	0	0
13	327.74	20,547	0	0	0	0	0
14	327.75	20,552	5	3	0	0	-1
15	327.52	20,444	-108	12	0	67	1
16	327.57	20,468	24	12	0	0	0
17	327.58	20,472	4	2	0	0	0
18	327.60	20,482	10	5	0	0	0
19	327.62	20,491	9	5	0	0	-1
20	327.63	20,496	5	3	0	0	-1
21	327.64	20,501	5	3	0	0	-1
22	327.65	20,505	4	2	0	0	0
23	327.67	20,515	10	5	0	0	0
24	327.67	20,515	0	0	0	0	0
25	327.67	20,515	0	0	0	0	0
26	327.65	20,505	-10	0	0	0	-10
27	327.68	20,519	14	7	0	0	0
28	327.67	20,515	-4	0	0	0	-4
29	327.67	20,515	0	0	0	0	0
30	327.68	20,519	4	2		0	0
31	327.68	20,519	0	0	0	0	0
Total			51	103	0	67	-22
Mean cfs			---	3	0	2	---
Acre-feet			51	204	0	132	-22

Table 18. Consolidated State-Federal Little Panoche Reservoir

Daily Operations

March 2003

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity: 5,580 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft) 1/	Storage Change (ac-ft) 1/	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft) 1/
					Spill	Outlet	
Feb 28	602.65	829			1	0	1
1	Not Observed				1	0	1
2	Not Observed				1	0	1
3	Not Observed				1	0	1
4	Not Observed				1	0	1
5	602.65	829			1	0	1
6	Not Observed				1	0	1
7	602.60	826	-3		0	0	1
8	602.60	826			1	0	1
9	Not Observed				1	0	1
10	Not Observed				1	0	1
11	Not Observed				1	0	1
12	Not Observed				1	0	1
13	Not Observed				1	0	1
14	Not Observed				1	0	1
15	Not Observed				1	0	1
16	602.60	826			1	0	1
17	Not Observed				1	0	1
18	Not Observed				1	0	1
19	Not Observed				1	0	1
20	Not Observed				1	0	1
21	602.60	826			1	0	1
22	Not Observed				1	0	1
23	Not Observed				1	0	1
24	Not Observed				1	0	1
25	Not Observed				1	0	1
26	602.60	826			1	0	1
27	Not Observed				1	0	1
28	602.60	826			2	0	2
29	602.60	826			1	0	1
30	602.60	826			1	0	1
31	602.55	824	-2		1	0	2
Total			-5	31	0	33	---
Mean cfs			---	1	0	1	---
Acre-feet			-5	60	0	65	0

1/ Not available on a daily basis

Table 19a. Governor Edmund G. Brown California Aqueduct
 San Luis Field Division, Monthly Deliveries

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending		Structure			USBR	Transfer 1/	DWR Recreation	USBR Recreation		
	No.	Structure									
2B	12	Check No. 12	66.71		347,952						
3A		San Luis Reservoir		Department of Parks and Recreation	2	7,118	724	1	1		
				San Felipe Division	7,118						
				Santa Clara Water District							
				San Felipe Division	724						
3	13	O'Neill Forebay	70.85	Department of Parks and Recreation	0	603	603	0	0		
				Cattle Program	1			38	31		
				Department of Fish & Game	69						
			70.91	San Luis Water District	603			603	0		
				Thru (Floodwater Inflow)	0						
				Reach 3 Subtotal:	673	603	0	39	31		
			86.73			308,322					
4	14		89.03 Thru 94.06	San Luis Water District	4,333	4,333	716	27	78		
				Pacheco Water District	716						
				89.66 Thru 89.67							
				Panoche Water District	27						
				89.70 City of Dos Palos	78						
			95.06 98.15 Thru 104.20			465	3,074	7,977			
				San Luis Water District	465						
				Panoche Water District	3,074						
				102.64 (Floodwater Inflow)	0						
				Broadview Water District	0						
	15		102.64 105.22 Thru 108.64	Westlands Water District	7,977	7,977					
				Check No.15	108.50						
				San Felipe Division Total:	7,842		7,842	0	0		
				Pacheco Water District Total:	716						
				Broadview Water District Total:	0						
				City of Dos Palos Total:	78						
				SLWD Reach 4 Subtotal:	5,401		5,401	0	0		
				Panoche Water District Total:	3,101						
				SLWD Total:	5,401						
				Westlands WD Reach 4 Subtotal:	7,977						

1/ Water transferred from Contra Costa WD.

Table 19b. Governor Edmund G. Brown California Aqueduct
San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
		Beginning and Ending				USBR	Transfer	DWR Recreation	USBR Recreation		
	No.	Structure	Mile								
5	16		110.52	(Reverse flow, Kings River)	0	7,943	1				
			Thru	Westlands Water District	7,943						
			122.05	Department of Fish and Game	1						
		Check No. 16	122.07								
	17		124.18	Westlands Water District	6,807	6,807					
			Thru								
			132.74								
	Check No. 17	132.95									
	18		133.81	Westlands Water District	9,374	9,374					
			Thru								
			142.61								
		Pleasant Valley Pumping Plant	143.16	Westlands Water District	6,876						
			143.16	City of Coalinga	197						
	Check No. 18	143.23									
				Westlands WD Reach 5 Subtotal:	31,000	31,000	0	0	0		
6	19		145.26	Westlands Water District	14,886	14,886					
			Thru								
			151.19								
		Check No. 19	155.64								
				Westlands WD Reach 6 Subtotal:	14,886	14,886	0	0	0		
7	20		156.34	City of Huron	64	64					
			156.40	Westlands Water District	7,072						
			Thru								
			163.69								
	Check No. 20	164.69									
	21		164.79	City of Avenal	190	190					
			167.04	Westlands Water District	1,731						
			Thru								
			171.67								
	Check No. 21	172.40				1,731					
				Reach 7 Total:	9,057	9,057	0	0	0		
				Westlands WD Total:	62,666	62,666	0	0	0		
				City of Coalinga Total:	197	197	0	0	0		
				City of Huron Total:	64	64	0	0	0		
				City of Avenal Total:	190	190	0	0	0		
				Phase I Water Total:	0	0	0	0	0		
Total San Luis Field Division Deliveries:					80,328	80,255	0	41	32		

Table 20. Consolidated State-Federal San Luis Canal 1/

Daily Operations

March 2003

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
			Non- Project 2/	Dos Amigos Pumping Plant	Pools 14 & 15 3/ 5/	Pool 15 5/	Pools 15 thru 21 4/ 5/	Flow Past Check 21	
Feb 28	27,404								
1	27,213	-191	0	4,138	97	45	721	3,218	-153
2	28,189	976	0	5,776	74	45	783	4,243	-139
3	27,940	-249	0	3,387	74	45	771	2,426	-197
4	27,510	-430	0	3,727	71	45	845	2,887	-95
5	26,949	-561	0	4,120	71	46	847	3,191	-248
6	27,164	215	0	4,574	75	45	947	3,149	-249
7	27,038	-126	0	4,379	75	47	949	3,071	-301
8	26,885	-153	0	4,940	79	46	945	3,668	-279
9	27,328	443	0	6,307	76	45	951	4,994	-18
10	26,912	-416	0	4,147	79	47	924	3,191	-116
11	26,362	-550	0	4,438	78	46	944	3,325	-322
12	27,827	1,465	0	5,705	78	45	947	3,541	-356
13	27,610	-217	0	5,008	74	47	965	3,900	-132
14	27,779	169	0	5,219	74	46	968	3,981	-64
15	28,595	816	0	4,722	83	46	937	3,934	689
16	27,210	-1,385	0	4,268	88	45	822	4,858	846
17	28,357	1,147	0	4,020	81	50	881	2,895	466
18	27,158	-1,199	0	3,586	110	55	852	3,399	226
19	26,847	-311	0	4,025	110	55	857	3,111	-49
20	27,247	400	0	4,745	108	57	1,056	3,536	214
21	26,897	-350	0	4,242	108	56	1,061	3,053	-140
22	27,490	593	0	2,508	107	55	1,068	628	-351
23	27,096	-394	0	3,767	101	57	1,113	2,860	165
24	27,099	3	0	3,287	103	55	1,144	2,050	67
25	26,614	-485	0	3,694	108	56	1,227	2,674	126
26	27,203	589	0	4,823	108	57	1,231	3,260	130
27	27,332	129	0	5,998	107	55	1,210	4,999	438
28	27,658	326	0	7,956	107	57	1,213	6,813	398
29	29,002	1,344	0	10,392	104	55	1,545	8,529	518
30	28,004	-998	0	8,995	104	56	1,548	8,579	790
31	27,117	-887	0	8,552	107	56	1,550	7,860	574
Total		-287	0	155,445	2,819	1,563	31,822	121,822	2,436
Mean cfs		---	0	5,014	91	50	1,027	3,930	79
Acre-feet		-287	0	308,322	5,592	3,101	63,118	241,633	4,835

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Pump In of Non-Project Water and Flood Water is included in the gain or loss.

3/ Includes 716 AF AG & 1 AF M&I to Pacheco W.D., 78 AF to the City of Dos Palos, and 2306 AF to San Luis Water District.

4/ Includes 64 AF to the City of Huron, 190 AF to the City of Avenal, 197 AF to the City of Coalinga, 62,666 to WWD, and 1 AF to F&G @ WWD Lateral 4L.

5/ Daily values averaged to include deliveries from March 4 through March 31.

Table 21. San Joaquin Field Division Plant Data

(in acre-feet)

March 2003

23

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	180	180	59	55	62	5,118	5,200	5,004	4,996
2	193	193	53	48	56	7,222	7,014	6,848	6,855
3	194	194	39	35	39	3,876	3,853	3,676	3,629
4	214	214	52	49	55	4,542	4,350	4,224	4,289
5	164	164	39	36	41	5,370	5,344	5,178	5,286
6	159	159	62	56	65	5,103	5,008	4,801	4,789
7	195	195	42	41	46	5,206	5,145	4,989	4,942
8	195	195	57	53	59	6,026	6,215	6,020	6,065
9	155	155	59	54	61	8,192	8,131	7,888	8,031
10	145	145	33	31	35	5,047	5,389	5,126	5,106
11	227	227	57	54	61	5,442	5,586	5,292	5,186
12	186	186	50	47	53	5,266	5,163	4,881	4,875
13	181	181	63	59	66	6,117	6,176	5,903	5,774
14	201	201	77	73	80	6,467	6,384	6,061	6,014
15	141	141	98	91	100	6,372	6,488	6,251	6,218
16	126	126	87	80	90	7,981	8,195	7,914	8,057
17	198	198	60	57	63	5,628	5,705	5,353	5,369
18	366	366	89	82	89	5,140	5,321	5,056	5,033
19	373	373	94	88	97	5,311	5,383	5,009	5,001
20	349	349	92	86	92	5,340	5,572	5,444	5,243
21	314	314	86	80	87	4,508	4,715	4,438	4,385
22	344	344	90	85	92	683	790	727	652
23	299	299	126	117	127	5,049	4,758	4,523	4,512
24	269	269	79	72	80	3,150	3,361	3,209	3,156
25	385	385	103	97	103	4,152	4,297	4,075	3,921
26	443	443	129	124	128	5,479	5,632	5,434	5,409
27	449	449	116	108	113	8,193	8,229	7,888	7,896
28	379	379	118	113	118	7,927	7,802	7,466	7,359
29	567	567	112	107	112	7,711	7,939	7,627	7,574
30	545	545	142	130	144	8,642	8,141	7,768	7,824
31	376	376	92	86	94	7,956	8,016	7,658	7,628
Total	8,512	8,512	2,455	2,294	2,508	178,216	179,302	171,731	171,074

Table 22a. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending					Table A Amount	USBR	Article 21 Water	Unscheduled Surplus Water	Other			
	No.	Structure	Mile										
7	21	Check No. 21	172.40		241,633								
8C	22		172.66	Empire West Side Irrig. Dist. TL - A	261	90	1,241	50	171	1/ 350			
				County of Kings TL - A	50								
				TLBWSA TL-A	4,052								
				175.18 DRWD - 1	669								
			180.64	177.54 DRWD - 1B	226	40	226	2,811 629	3,182				
				180.64 TLBWSA - C	0								
				180.65 DRWD - 1A	603								
				182.99 DRWD - 2	2,282								
				183.00 Tulare Lake Basin WSD TL - B	3,182								
				184.00 DRWD - Paramount	2								
31A	8D		184.63	184.63 Coastal Branch	8,512	2	1,110	1,172	3,182				
8D				184.78 Dudley Ridge Water Dist. DRWD - 3	909								
				Dudley Ridge Reach 8D Total:	4,691	559	2,540	1,801	0	350			
				Tulare Lake Basin WSD Total:	7,234								
Check No. 22			184.82		1,241	0	5,993	0					
9		189.69	Kern County Water Agency Lost Hills Water Dist. - 1	1,975		528	769	2/ 678					
			191.18 Kern County Water Agency Lost Hills Water Dist. - 2	360									
			194.22 Kern County Water Agency Lost Hills Water Dist. - 3	0									
			196.40 Kern County Water Agency Berrenda Mesa - 2	0									
			196.75 Kern County Water Agency Lost Hills Water Dist. - 4	798		798	0	0					
			K.C.W.A. Reach 9 Subtotal:	1,686									
10A	24		Check No. 23	197.05		1,686	0	0	0	0			
			201.24	Kern County Water Agency Lost Hills Water Dist. - 7	335		335	442	647				
				202.05 Kern County Water Agency Lost Hills Water Dist. - 5	442								
				204.69 Kern County Water Agency Lost Hills Water Dist. - 6	0								
				205.26 Kern County Water Agency Lost Hills Water Dist. - 8	2		2	1,291	1,991 1,621	3/ 5,265			
			Check No. 24	207.94									
	25		209.71	Kern County Water Agency Belridge Water Storage Dist. - 1A	1,291	644	1,291	0	0				
				Kern National Wildlife Refuge USBR BV-1B	1,291								
			209.78	Kern County Water Agency Buena Vista WSD 1B	0								
				209.80 KCWA Semitropic WSD	1,991								
				KCWA Semitropic WSD Penstocks	7,448		562	0	1,291	0			
				USBR Total:	1,291								
				K.C.W.A. Reach 10A Subtotal:	11,509	1,985	0	4,259	0	5,265			

1/ Kern Water Bank recovery.

2/ Recovery of same contractors pumpin.

3/ CVP carryover water from SLDMWA for storage in Semi Tropic; Includes Del Puerto WD (979 AF), San Luis WD (3,428 AF), and Panoche WD (858 AF).

Table 22b. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries						
	Beginning and Ending					Table A Amount	Recovery of Pump In	Article 21 Water	Purchase Pool B	MWD Ent.		
	No.	Structure	Mile									
11B	25	210.75	Kern County Water Agency Belridge - 2	0	143 5,554 91	143						
		214.11	Kern County Water Agency Belridge - 3	143								
		216.62	Kern County Water Agency Belridge - 4	0								
		217.13	Kern County Water Agency Belridge - 5	5,554								
			Kern County Water Agency Belridge - 5D	91								
		Check No. 25	217.79									
			K.C.W.A. Reach 11B Subtotal:	5,788	5,788		0	0	0	0		
12D	26	219.58	Kern County Water Agency Belridge - 6	0	270		18					
			Kern County Water Agency West Kern - 3	288								
		Check No. 26	224.92									
12E	27	230.37	Kern County Water Agency Buena Vista - 6	0	5,548		5,548					
		Check No. 27	231.73									
	28	235.75	Kern County Water Agency Buena Vista - 2	0								
			Kern County WA CVC	5,548								
			DRWD CVC	0								
			Tulare Co.	0								
		238.04	Lower Tule River	0								
			Fresno Co.	0								
			Pixley ID	0								
			Hacienda DWR Wells	0								
	Check No. 28	238.11										
			1/ Arvin Edison Total:	0	0	0	0	0	0	0		
			Reach 12E Subtotal:	5,566	0	0	5,566	0	0	0		
13B	29	238.19	Kern Water Bank Inflow	0	5,028		5,028					
			Kern Water Bank Outflow	5,028								
		241.02	Kern River Intertie (inflow)	0								
		242.85	KCWA Buena Vista WSD - 7	0								
			KCWA Buena Vista WSD - 5	355								
		243.09	Kern County Water Agency Buena Vista - 3	920								
	Check No. 29	244.54	Buena Vista WSD	0	920		920					
	30	249.85	Kern County Water Agency Buena Vista - 4	232								
		Buena Vista Pumping Plant	250.99									
			K.C.W.A. Reach 13B Subtotal:	178,216								
14A	31	254.47	Kern County Water Agency West Kern - 2	0	143		6,392	0				
		256.11	Kern County Water Agency Wheeler Ridge-Maricopa - 2	15								

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

Table 22c. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Recovery of Pump In	Article 21 Water	Other	MWD Ent.		
	No.	Structure	Mile									
14A	31	Check No. 31	256.14			225						
	32		258.61	Kern County Water Agency Wheeler Ridge-Maricopa - 3	225							
			260.44	Kern County Water Agency Wheeler Ridge-Maricopa - 4	851		851					
		Check No. 32	261.72									
				KCWA Reach 14A Subtotal:	1,091	1,091	0	0	0	0		
14B	33		264.42	Kern County Water Agency Wheeler Ridge-Maricopa - 5	1,854	949		905				
			266.91	Kern County Water Agency Wheeler Ridge-Maricopa - 6	100		100					
	Check No. 33	267.36										
	34		270.24	Kern County Water Agency Wheeler Ridge-Maricopa - 7	1,468	1,468						
		Check No. 34	271.27									
				Reach 14B Total:	3,422	2,517	0	905	0	0		
14C	35		272.39	Kern County Water Agency Wheeler Ridge-Maricopa - 8	768	768						
			276.09	Kern County Water Agency Wheeler Ridge-Maricopa - 9	323		323					
				Reach 14C Total:	1,091		1,091	0	0	0		
15A	Teerink Pumping Plant	278.13			179,302							
	36		279.02	Kern County Water Agency Wheeler Ridge-Maricopa - 9A	197	197						
			280.06	Kern County Water Agency Wheeler Ridge-Maricopa - 10	1,833		1,833					
				Reach 15-A Total:	2,030		2,030	0	0	0		
	Chrismen Pumping Plant	280.36			171,731							
16A	37		282.06	Kern County Water Agency Wheeler Ridge-Maricopa - 11	0	7						
		Check No. 37	283.95									
	38		285.01	Kern County Water Agency Wheeler Ridge-Maricopa - 12	7		7					
			286.39	Kern County Water Agency Wheeler Ridge-Maricopa - 13A	77		77					
			287.06	Kern County Water Agency Wheeler Ridge-Maricopa - 13	0							
	Check No. 38	287.09										
	39		287.62	Kern County Water Agency Wheeler Ridge-Maricopa - 13B	85		85					
		Check No. 39	290.21									
	40		291.26	Kern County Water Agency Wheeler Ridge-Maricopa - 14	433	433						
			293.07	Kern County Water Agency Wheeler Ridge-Maricopa - 15	130		130					
				Kern County Water Agency Tehachapi Cummings CWD	534		195	167	1/ 172			
				K.C.W.A. Reach 16A Subtotal:	1,266		927	0	167	172		
		Edmonston Pumping Plant	293.45		171,074					0		

1/ Municipality/Industrial Carryover

Table 23. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Recovery of Pump In	Other 1/	Carryover	Article 21 Water		
	No.	Structure	Mile									
31A	C-1	Coastal Branch Control	0.02		8,512	2,197	696	419	396			
		Las Perillas Pumping Plant	1.16		8,512							
	C-2		3.79	Green Valley Water District	0							
		Badger Hill Pumping Plant	4.27		8,512							
	C-3	Coastal Check No. 3	7.21									
	C-4		9.34	Castaic Lake WA (Devil's Den WD #1)	2,593							
		Coastal Check No. 4	9.34									
	C-5	Coastal Check No. 5	12.20									
	C-6		13.30	Kern County Water Agency Berrenda Mesa - 3	696							
			14.83	Kern County Water Agency Berrenda Mesa - 1	2,664							
				Kern County Water Agency Berrenda Mesa - PO	0							
		Devil's Den Pumping Plant	14.86		2,455							
				K.C.W.A. Reach 31A Subtotal:	3,360	2,941	0	0	0	419		
				K.C.W.A. Total:	43,614	20,469	0	5,265	172	17,708		
33A	C-7	Bluestone Pumping Plant	19.05		2,294	1,887	330	236	24			
	C-8	Polonio Pass Pumping Plant	26.54		2,508							
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant								
	C-10	Shandon T.O.	38.23	Santa Barbara County (CCWA)	2,123							
		Tank Site 2	58.63	Central Coast:	0							
34	C-11	Chorro Valley T.O.	69.31	San Luis Obispo County (CCWA)	354	2,217	0	0	0	260		
		Energy Dissipater	78.12									
35	C-12	Lopez T.O.	85.86	SLOCFC & WCD	0							
				CCWA Total:	2,477							
		Guadalupe T.O.	102.70	SBCFC & WCD	0							
		Santa Maria T.O.	107.43	SBCFC & WCD	0							
		So. Cal. Water T.O.	109.20	SBCFC & WCD	0							
38				SBCFC & WCD Total:	0	0	0	0	0	0		
		Tank Site 5	115.42									

1/ Includes 678 AF of recovery of same contractors pumpin and 5,265 AF of CVP carryover water from SLDWMA

for storage in Semi Tropic which includes; Del Puerto WD (979 AF), San Luis WD (3,428 AF), and Panoche WD (858 AF).

Table 24. Southern Field Division Plant Data

(in acre-feet)

March 2003

Date	West Branch					East Branch										
	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant		Alamo Powerplant			Pearblossom Pumping Plant	Mojave Siphon Powerplant			Devil Canyon Powerplant Generation	Cherry Hill	Green Spot	Crafton Hills
		Generation	Leakage	Generation	Pumpback	Generation	Bypass Through Plant	Cottonwood Chute		Generation	Leakage	Bypass Flume				
28	1	2,451	3,175	0	1,069	0	0	13	2,499	2,392	2,370	0	0	2,817		
	2	3,177	2,351	0	117	0	0	12	3,706	3,495	3,000	0	0	2,579		
	3	1,942	2,021	0	4,967	0	0	13	1,696	1,738	2,129	0	0	2,437		
	4	2,408	3,019	0	3,424	0	0	11	1,847	1,569	1,562	0	0	2,268		
	5	2,665	3,020	0	4,056	0	0	11	2,572	2,561	2,518	0	0	2,421		
	6	1,963	2,147	0	3,720	0	0	12	2,817	2,751	2,574	0	0	2,788		
	7	2,451	2,731	0	3,682	0	0	0	2,429	2,416	2,433	0	0	2,820		
	8	2,005	2,603	0	327	0	0	0	3,447	2,987	2,757	0	0	2,918		
	9	3,838	1,964	0	504	0	0	0	4,102	4,060	3,686	0	0	3,168		
	10	2,353	2,491	0	3,597	0	0	8	2,857	2,637	2,953	0	0	2,678		
	11	2,139	2,421	0	3,808	0	0	7	3,056	2,818	2,683	0	0	2,712		
	12	1,983	1,936	0	4,046	889	0	5	2,890	2,895	2,689	0	0	2,943		
	13	2,859	3,194	0	3,604	686	0	0	2,815	2,650	2,770	0	0	2,653		
	14	2,693	3,299	0	5,928	0	0	0	3,260	3,151	2,777	0	0	2,940		
	15	2,965	2,958	0	1,414	0	0	0	3,293	3,061	2,852	0	0	3,027		
	16	3,803	1,998	0	194	986	0	0	4,237	3,979	3,862	0	0	2,828		
	17	2,493	2,810	0	4,039	941	0	0	2,899	2,922	3,001	0	0	2,806		
	18	2,284	2,810	0	2,796	0	0	0	2,670	2,714	2,561	0	0	2,838		
	19	2,633	3,010	0	1,849	0	0	0	2,353	2,417	2,388	0	0	2,504		
	20	2,728	2,896	0	3,771	0	0	0	2,532	2,302	2,320	0	0	2,415		
	21	2,259	2,734	0	3,841	0	0	14	2,119	1,852	1,748	0	0	2,675		
	22	420	809	0	3,851	0	0	14	231	0	0	0	0	2,323		
	23	3,922	3,230	0	1,369	9	0	12	592	346	0	0	0	2,317		
	24	1,334	2,031	0	3,080	1,970	0	12	1,811	1,986	1,627	0	0	2,103		
	25	1,544	2,025	0	4,417	2,166	0	11	2,368	2,112	2,164	0	0	2,060		
	26	2,404	2,372	0	4,934	2,359	0	10	2,983	2,488	2,456	0	0	2,115		
	27	3,477	3,266	0	4,699	1,152	0	13	4,447	4,136	3,464	0	0	2,358		
	28	3,477	3,070	0	5,261	545	0	7	3,866	3,712	3,924	0	0	2,502		
	29	3,371	2,920	0	869	575	0	9	4,205	3,802	3,678	0	0	3,005		
	30	3,907	2,724	0	992	893	0	10	4,043	3,788	3,243	0	0	3,036		
	31	3,780	3,131	0	8,284	0	0	6	3,853	3,392	3,763	0	0	2,919		
	Total	81,728	81,166	0	98,509	13,171	0	210	88,495	83,129	79,952	0	0	81,973	0	0

Table 25. Pyramid Lake
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)	
				Project		Natural	Project		Natural		
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek		
Feb 28	2573.80	164,535									
1	2575.48	166,668	2,133	0	3,175	56	1,069	0	12	-17	
2	2577.18	168,845	2,177	0	2,351	54	117	0	12	-99	
3	2574.89	165,917	-2,928	0	2,021	47	4,967	0	12	-17	
4	2574.58	165,523	-394	0	3,019	50	3,424	0	12	-27	
5	2573.73	164,447	-1,076	0	3,020	45	4,056	0	12	-73	
6	2572.49	162,885	-1,562	0	2,147	43	3,720	0	12	-20	
7	2571.71	161,908	-977	0	2,731	41	3,682	0	12	-55	
8	2573.47	164,119	2,211	0	2,603	39	327	0	12	-92	
9	2574.66	165,625	1,506	0	1,964	39	504	0	12	19	
10	2573.73	164,447	-1,178	0	2,491	37	3,597	0	12	-97	
11	2572.50	162,898	-1,549	0	2,421	37	3,808	0	12	-187	
12	2571.60	161,770	-1,128	889	1,936	35	4,046	0	12	70	
13	2571.71	161,908	138	686	3,194	35	3,604	0	12	-161	
14	2569.40	159,035	-2,873	0	3,299	35	5,928	0	12	-267	
15	2571.30	161,395	2,360	0	2,958	609	1,414	1	12	220	
16	2573.90	164,662	3,267	986	1,998	520	194	0	12	-31	
17	2573.90	164,662	0	941	2,810	242	4,039	0	12	58	
18	2573.91	164,675	13	0	2,810	160	2,796	0	12	-149	
19	2574.84	165,853	1,178	0	3,010	125	1,849	0	12	-96	
20	2574.12	164,940	-913	0	2,896	103	3,771	0	20	-121	
21	2573.15	163,715	-1,225	0	2,734	87	3,841	0	70	-135	
22	2570.70	160,648	-3,067	0	809	76	3,851	0	70	-31	
23	2572.23	162,559	1,911	9	3,230	69	1,369	0	67	39	
24	2572.82	163,300	741	1,970	2,031	63	3,080	0	53	-190	
25	2572.60	163,023	-277	2,166	2,025	58	4,417	0	53	-56	
26	2572.38	162,747	-276	2,359	2,372	52	4,934	0	54	-71	
27	2572.03	162,308	-439	1,152	3,266	50	4,699	0	54	-154	
28	2570.62	160,548	-1,760	545	3,070	48	5,261	0	54	-108	
29	2572.67	163,111	2,563	575	2,920	46	869	0	54	-55	
30	2574.72	165,701	2,590	893	2,724	41	992	0	54	-22	
31	2570.53	160,436	-5,265	0	3,131	42	8,284	0	54	-100	
Total				-4,099	13,171	81,166	2,984	98,509	1	885	-2,025

Table 26. Elderberry Forebay

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)	
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake	Natural		
Feb 28	1511.79	19,879								
1	1507.00	18,048	-1,831	1,069	12	0	12	2,902	2	
2	1506.05	17,695	-353	117	12	0	12	474	4	
3	1509.67	19,057	1,362	4,967	11	0	11	3,004	-601	
4	1508.92	18,771	-286	3,424	11	0	11	3,708	-2	
5	1510.56	19,400	629	4,056	10	0	10	3,432	5	
6	1510.35	19,319	-81	3,720	9	0	9	3,803	2	
7	1511.73	19,856	537	3,682	8	0	8	3,137	-8	
8	1502.36	16,358	-3,498	327	8	0	8	3,817	-8	
9	1503.71	16,841	483	504	7	0	7	0	-21	
10	1512.79	20,274	3,433	3,597	6	0	6	0	-164	
11	1515.00	21,161	887	3,808	5	0	5	2,911	-10	
12	1515.20	21,242	81	4,046	5	889	5	3,071	-5	
13	1514.71	21,043	-199	3,604	5	686	5	3,117	0	
14	1521.51	23,888	2,845	5,928	5	0	5	3,082	-1	
15	1518.05	22,417	-1,471	1,414	124	0	124	2,788	-97	
16	1516.43	21,745	-672	194	110	986	110	0	120	
17	1517.88	22,346	601	4,039	55	941	55	2,397	-100	
18	1518.41	22,568	222	2,796	38	0	38	2,573	-1	
19	1516.51	21,778	-790	1,849	30	0	30	2,638	-1	
20	1517.81	22,317	539	3,771	24	0	24	3,209	-23	
21	1518.07	22,425	108	3,841	20	0	20	3,731	-2	
22	1518.59	22,644	219	3,851	17	0	17	3,620	-12	
23	1521.68	23,962	1,318	1,369	15	9	15	0	-42	
24	1517.09	22,017	-1,945	3,080	13	1,970	13	3,042	-13	
25	1516.00	21,568	-449	4,417	12	2,166	12	2,707	7	
26	1514.75	21,059	-509	4,934	11	2,359	11	3,086	2	
27	1515.89	21,523	464	4,699	10	1,152	10	3,090	7	
28	1520.31	23,373	1,850	5,261	9	545	9	2,865	-1	
29	1513.25	20,457	-2,916	869	8	575	8	3,211	1	
30	1513.40	20,516	59	992	6	893	6	0	-40	
31	1525.87	25,803	5,287	8,284	4	0	4	2,990	-7	
Total				5,924	98,509	620	13,171	620	78,405	-1,009

Table 27. Castaic Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow		Computed Losses (-) And Gains (+)	
				From Elderberry Forebay		Natural	Deliveries		
				Natural	Project				
Feb 28	1478.88	248,734							
1	1479.69	250,295	1,561	12	2,902	7	1,327	0 -33	
2	1479.26	249,465	-830	12	474	7	1,310	0 -13	
3	1480.40	251,667	2,202	11	3,004	7	1,407	0 587	
4	1481.73	254,250	2,583	11	3,708	7	1,156	0 13	
5	1482.87	256,475	2,225	10	3,432	7	1,149	0 -75	
6	1484.15	258,986	2,511	9	3,803	6	1,265	0 -42	
7	1485.11	260,878	1,892	8	3,137	6	1,282	0 23	
8	1486.40	263,432	2,554	8	3,817	6	1,290	0 13	
9	1485.72	262,084	-1,348	7	0	6	1,387	0 26	
10	1485.03	260,720	-1,364	6	0	5	1,550	0 175	
11	1485.75	262,143	1,423	5	2,911	4	1,535	0 38	
12	1486.43	263,491	1,348	5	3,071	4	1,703	0 -29	
13	1487.11	264,843	1,352	5	3,117	4	1,794	0 20	
14	1487.77	266,159	1,316	5	3,082	3	1,698	0 -76	
15	1488.94	268,500	2,341	124	2,788	186	1,454	0 697	
16	1488.17	266,958	-1,542	110	0	157	1,664	0 -145	
17	1488.78	268,180	1,222	55	2,397	66	1,553	0 257	
18	1489.26	269,143	963	38	2,573	39	1,419	0 -268	
19	1489.86	270,350	1,207	30	2,638	27	1,541	0 53	
20	1490.67	271,979	1,629	24	3,209	22	1,492	0 -134	
21	1491.75	274,163	2,184	20	3,731	19	1,528	0 -58	
22	1492.69	276,072	1,909	17	3,620	18	1,686	0 -60	
23	1491.86	274,386	-1,686	15	0	17	1,686	0 -32	
24	1492.58	275,848	1,462	13	3,042	16	1,800	0 191	
25	1493.04	276,785	937	12	2,707	13	1,822	0 27	
26	1493.64	278,009	1,224	11	3,086	11	1,938	0 54	
27	1494.09	278,930	921	10	3,090	9	2,032	0 -156	
28	1494.46	279,688	758	9	2,865	8	2,032	0 -92	
29	1495.05	280,899	1,211	8	3,211	7	2,005	0 -10	
30	1494.00	278,745	-2,154	6	0	7	2,250	0 83	
31	1494.30	279,360	615	4	2,990	4	2,256	0 -127	
Total				30,626	620	78,405	705	50,011 907	

Table 28. Governor Edmund G. Brown California Aqueduct
 Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending					Table A Amount	Rec.	Local	Other				
	No.	Structure	Mile										
29A	42	Oso Pumping Plant	1.49					81,728					
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency		Removed	1	1					
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency		Stub							
29G		Warne Power Plant	14.07					81,166					
29H	W3	Pyramid Lake		Calif. State Park Pyramid Recreation		1	16	4/					
			14.10	United Water Conservation Dist.		0							
		Pyramid Dam	17.10	Piru Creek Fish Enhancement		0							
29J	W4	Castaic Power Plant	25.82	(13,171 AF pumpback)		98,509	16	5/					
		Elderberry Forebay											
		Forebay Dam	28.12										
30 1/	W5	Castaic Lake		Calif. State Park Castaic Lake Recreation		16	16	2/ 220					
		Castaic Dam	31.47										
		Castaic Lake Outlet	31.55	MWD - 78"		10,653							
				MWD - 132"		36,607							
				Castaic Lake WA - T1		1,343							
				Castaic Lake WA		1,238							
				United Water Conservation Dist.		0							
				MWD - Ventura County FCD		154							
				LA Co. Parks & Recreation		0							
				Releases to Lagoon		0							
						Reach 30 Subtotal:	50,011	49,378	16	0	220	397	
	W6	Castaic Lagoon		Recreation to Lagoon		0							
		Castaic Lagoon Outlet	31.87										

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

2/ Table A Special Carryover water.

3/ Article 21 Water.

4/ MWD received an additional 38,500 AF of flexible payback with carryover water.

5/ MWD received an additional 12,000 AF of flexible payback with Article 21 water.

Table 29. Silverwood Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)	Las Flores Ranch Exchange 1/	
							Project		Del. To Mojave W.A.	Natural To Mojave River			
				Mojave Siphon Power-plant	Mojave Bypass Flume	Natural Stream Flow	Delivered to CLAWA	Rec.					
Feb 28	3349.57	69,772											
1	3349.11	69,341	-431	2,370	0	52	4	0	2,817	0	0	-32	
2	3349.63	69,829	488	3,000	0	42	4	0	2,579	0	0	29	
3	3349.34	69,557	-272	2,129	0	35	4	0	2,437	0	0	5	
4	3348.60	68,865	-692	1,562	0	31	3	0	2,268	0	0	-14	
5	3348.87	69,117	252	2,518	0	27	4	0	2,421	0	0	132	
6	3348.60	68,865	-252	2,574	0	23	4	0	2,788	0	0	-57	
7	3348.58	68,843	-22	2,433	0	21	3	0	2,820	0	0	347	
8	3348.14	68,437	-406	2,757	0	19	1	0	2,918	0	0	-263	
9	3348.68	68,940	503	3,686	0	18	1	0	3,168	0	0	-32	
10	3349.07	69,304	364	2,953	0	16	1	0	2,678	0	0	74	
11	3349.07	69,304	0	2,683	0	16	12	0	2,712	0	0	25	
12	3348.99	69,229	-75	2,689	0	15	2	1	2,943	0	0	167	
13	3348.99	69,229	0	2,770	0	14	4	0	2,653	0	0	-127	
14	3348.84	69,089	-140	2,777	0	14	4	0	2,940	0	0	13	
15	3349.15	69,379	290	2,852	0	169	4	0	3,027	0	0	300	
16	3351.12	71,235	1,856	3,862	0	786	4	0	2,828	0	0	40	
17	3351.28	71,387	152	3,001	0	310	4	0	2,806	0	244	-105	
18	3350.73	70,865	-522	2,561	0	129	4	0	2,838	0	295	-75	
19	3350.66	70,799	-66	2,388	0	88	4	0	2,504	0	80	46	
20	3350.50	70,648	-151	2,320	0	66	4	0	2,415	0	80	-38	
21	3349.61	69,810	-838	1,748	0	55	4	0	2,675	0	78	116	
22	3347.05	67,429	-2,381	0	0	46	4	0	2,323	0	80	-20	
23	3344.34	64,957	-2,472	0	0	40	7	1	2,317	0	70	-117	
24	3343.83	64,497	-460	1,627	0	36	4	0	2,103	0	41	25	
25	3343.95	64,605	108	2,164	0	32	4	0	2,060	0	0	-24	
26	3344.42	65,029	424	2,456	0	29	4	0	2,115	0	0	58	
27	3345.62	66,118	1,089	3,464	0	26	4	0	2,358	0	0	-39	
28	3347.13	67,503	1,385	3,924	0	24	4	0	2,502	0	0	-57	
29	3348.02	68,326	823	3,678	0	22	4	0	3,005	0	0	132	
30	3348.21	68,502	176	3,243	0	19	4	0	3,036	0	0	-46	
31	3349.15	69,379	877	3,763	0	19	4	0	2,919	0	0	18	
Total				-393	79,952	0	2,239	122	2	81,973	0	968	481
												600	

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

Table 30. Lake Perris

Daily Operation

(in acre-feet except as noted)

Capacity: 131,452 ac-ft

March 2003

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow 1/	Outflow 2/	Computed Losses (-) Gains (+) 1/
Feb 28	1582.38	114,210				
1	1582.61	114,717	507		307	
2	1582.92	115,402	685		308	
3	1583.07	115,734	332		309	
4	1583.23	116,088	354		308	
5	1583.49	116,665	577		307	
6	1583.68	117,087	422		307	
7	1584.07	117,955	868		298	
8	1583.94	117,665	-290		456	
9	1584.22	118,290	625		397	
10	1584.33	118,535	245		310	
11	1584.40	118,692	157		407	
12	1584.56	119,049	357		407	
13	1584.56	119,049	0		407	
14	1584.77	119,519	470		408	
15	1585.03	120,103	584		404	
16	1585.33	120,777	674		409	
17	1585.39	120,912	135		448	
18	1585.65	121,497	585		309	
19	1585.88	122,016	519		309	
20	1586.15	122,627	611		308	
21	1586.44	123,283	656		308	
22	1586.42	123,238	-45		298	
23	1586.58	123,601	363		298	
24	1586.60	123,646	45		329	
25	1586.63	123,715	69		308	
26	1586.69	123,851	136		308	
27	1586.62	123,692	-159		308	
28	1586.57	123,578	-114		527	
29	1586.53	123,488	-90		182	
30	1586.53	123,488	0		10	
31	1586.51	123,442	-46		11	
Total			9,232	21,745	10,010	-2,503

1/ Readings are not taken on a daily basis. End of month only.

2/ Includes deliveries to MWD from Reach 28J and recreation water to California State Park at lake Perris.

Table 31a. Governor Edmund G. Brown California Aqueduct
 Southern Field Division, Monthly Deliveries (East Branch)

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending					Table A Amount	Rec.	Transfer	Table A Special Carryover				
	No.	Structure	Mile						Extended Table A Carryover				
17E	40	Edmonston Pumping Plant	293.45		171,074								
	41		298.65		Kern County Water Agency Tej.-Cas		Stub						
17F		Check No. 41	303.41										
18A	42	Check No. 42	304.99										
19	43	Alamo Powerplant	305.73	(88,495 AF down Cottonwood Chute and 210 AF bypass)	88,705				79	640			
			308.05	Antelope Valley-East Kern WA	0								
		Check No. 43	309.70										
	44		311.84	LADWP Connection	0								
			313.50	AVEK 245th Street West	0								
	Check No. 44		314.81										
	45		314.93	AVEK 235th Street West	0								
			315.57	AVEK 225th Street West	0								
	Check No. 45		319.74										
	46		323.19	Antelope Valley-East Kern WA Fairmont	719								
		Check No. 46	323.84										
				Reach 19 Total:	719	0	0	79	640	0			
20A	47	Check No. 47	326.77						34	34			
	48		326.91	Antelope Valley-East Kern WA Willow Springs Siphon	34								
			329.65	Antelope Valley-East Kern WA 120th Street West	Removed								
		Check No. 48	330.82										
	49	Check No. 49	335.93										
	50		336.73	AVEK WA - Quartz Hill (Wheeled for Palmdale WD)	0				1,720	1,720			
				Antelope Valley-East Kern WA	1,720								
			339.68	Antelope Valley-East Kern WA	8								
20B		Check No. 50	341.51						79	781			
	51	Check No. 51	342.07										
	52		342.80	Antelope Valley-East Kern WA 30th Street West	Not in Use								
		Check No. 52	343.74										
	53		346.98	PWD Palmdale	1,008		148						
			348.14	Antelope Valley-East Kern WA Acton Treatment Plant	65								
21		Check No. 53	348.17						65	65			
	54	Check No. 54	350.25										
	55	Check No. 55	352.70										
	56	Check No. 56	354.76										
22A			354.97	Littlerock Creek I.D.	0				47	47			
	58	Check No. 57	356.93										
			357.60	Antelope Valley-East Kern WA	47								
			357.72	Antelope Valley-East Kern WA 96th Street East	0								
			359.82	Antelope Valley-East Kern WA East Side Treatment Plant	305		187		118	118			

Table 31b. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

March 2003

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending					Table A Amount	Rec-creation	Local	Stream Flow Exch.	Other			
	No.	Structure	Mile										
22B	58	Pearblossom Pumping Plant	360.61		83,129	185	131	122	2	1/ 352	1/ 2,003		
	59	Check No. 59	366.09										
	60		366.50		Antelope Valley-East Kern WA								
		Check No. 60	373.94										
	61	Check No. 61	379.00										
	62	Check No. 62	384.26										
	63	Check No. 63	389.20		Mojave Water Agency Mojave River								
			394.60		Mojave Water Agency Temporary								
	64	Check No. 64	395.10										
	65	Check No. 65	400.32										
	66		401.10		Mojave Water Agency Morongo 24" and 42"								
					Mojave Water Agency Hesperia								
23	Check No. 66	403.41				3,255	70	10,810	3/ 897	1/ 4,154	2/ 36,270		
	Mojave Siphon	405.48			Las Flores Ranch								
	Mojave Siphon Powerplant	405.65											
24	67	Silverwood Lake	407.65		Crestline Lake Arrowhead Water Agency								
					Calif. State Park Silverwood Agency (Rec.)								
25	67	San Bernardino Tunnel	411.46										
					San Gorgonio Pass Water Agency								
26A	68	Devil Canyon Afterbay Control Structures	412.88		MWD-SC Rialto								
					Desert Water Agency (MWD Wheeling Exchange)								
					San Gabriel Valley Water District								
					Coachella Valley WD (MWD Wheeling Exchange)								
					San Bernardino Valley MWD 24" and 72"								
					San Bernardino Valley MWD 48"								
					MWD (SBVMWD Exchange)								
					10,810								
28G	69	Santa Ana Valley Pipeline	425.46			4,827	1,366	316	3/ 897	5/ 246	5/ 136		
28H			433.06		MWD-SC Box Springs								
			440.05		MWD-SC Perris Bypass Pipeline								
28J			442.00		MWD-SC 18"								
	69	Lake Perris	443.44		MWD-SC 54"								
					MWD-SC 78"								
					Calif. State Park Lake Perris Recreation								
					MWD Total:								

1/ Table A Special Carryover water.

2/ Includes 34,270 AF of Extended Table A Carryover water and 2,000 AF of EWA water.

3/ Arvin Edison Water Bank Recovery

4/ Flexible Payback with Article 21 Water.

5/ Article 21 Water.

Table 32. Water Quality At Selected SWP Locations

March 2003

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Banks Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct				Devil Canyon Afterbay Near San Bernardino
						O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachapi Afterbay (Check 41)	
Alkalinity	mg/l as CaCO ₃	42	160	75	78	81	79	80	84	84
Antimony	mg/l	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NR	NR
Arsenic	mg/l	<0.001	0.002	0.002	0.001	0.002	0.002	<0.001	0.002	0.002
Beryllium	mg/l	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/l	<0.1	0.4	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Bromide	mg/l	<0.01	0.09	0.08	0.10	0.11	0.10	0.12	0.14	0.17
Calcium	mg/l	8	24	18	19	20	20	21	23	23
Carbon - Dissolved Organic	mg/l as C	NR	6	3	3	3	3	3	3	5
Carbon - Total Organic	mg/l as C	NR	6	3	3	3	3	3	4	4
Chloride	mg/l	1	50	29	37	42	39	44	50	59
Chromium	mg/l	0.002	0.008	0.004	0.004	0.003	0.003	0.002	0.005	0.004
Copper	mg/l	0.001	0.003	0.002	0.002	0.002	0.002	<0.001	0.002	0.006
Fluoride	mg/l	<0.1	0.2	<0.1	0.1	0.1	0.1	0.1	0.1	0.4
Hardness	mg/l as CaCO ₃	36	159	86	89	95	95	98	111	103
Iron	mg/l	0.010	0.014	0.054	<0.005	0.024	<0.005	0.007	0.022	0.020
Lead	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/l	4	24	10	10	11	11	11	13	11
Manganese	mg/l	<0.005	0.024	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	0.058
Nitrate + Nitrite	mg/l as N	<0.01	0.34	0.57	NR	NR	0.74	NR	1.00	1.10
Phosphorus-Ortho	mg/l as P	<0.01	0.12	0.05	NR	NR	0.06	NR	0.07	0.06
Phosphorus-Total	mg/l	0.01	0.09	0.07	NR	NR	0.10	NR	0.10	0.07
Selenium	mg/l	NR	<0.001	<0.001	NR	NR	NR	<0.001	NR	NR
Sodium	mg/l	3	56	25	30	35	32	36	43	45
Specific Conductance	µS/cm	86	572	293	338	378	360	384	436	441
Sulfate	mg/l	2	63	26	34	43	39	46	54	43
Total Dissolved Solids	mg/l	53	345	176	200.5	229	215	231	264	266
Turbidity	NTU	9	26	9	20	5	9.5	11	11	2
Zinc	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0

mg/l milligrams per liter

µg/l micrograms per liter

µS/cm microSiemens per centimeter

NR - Not Reported

NTU - nephelometric turbidity units

Table 33. Water Quality At Selected Delta Stations

March 2003

Date	Tides (feet above mean sea level)		Flow In CFS		Electrical Conductivity in millSiemens/cm								Cl in mg/l			
			Net Delta Outflow Index		Rio Vista	Antioch	Chipps island	Emmaton		Jersey Point		Clifton Court	Cache Slough	Delta Mendota Canal		
	(Antioch) Daily Mean		Mean Daily	Monthly Average				md	md	md	14dm	md	14dm	md	Contra Costa Canal Intake	
	Hi	Half	md	md	md	md	md	14dm	md	14dm	md	md	md	md	md	
38	1	3.11	1.16	20,343	20,343	23,037	0.15	0.16	0.17	0.16	0.19	0.21	0.30	0.97	0.56	74
	2	2.88	1.00	18,032	19,187	21,116	0.15	0.16	0.17	0.16	0.19	0.20	0.30	0.96	0.57	70
	3	2.89	1.09	15,380	17,918	19,218	0.12	0.00	0.17	0.16	0.19	0.20	0.30	0.97	0.57	71
	4	2.76	1.10	13,338	16,773	17,951	0.14	0.22	0.18	0.16	0.19	0.20	0.30	0.97	0.58	71
	5	2.44	0.93	11,513	15,721	17,022	0.14	0.21	0.18	0.16	0.19	0.20	0.30	0.98	0.60	70
	6	2.39	0.89	10,740	14,891	15,976	0.14	0.21	0.19	0.17	0.20	0.20	0.26	0.98	0.59	69
	7	2.42	0.81	9,292	14,091	15,487	0.14	0.27	0.19	0.17	0.20	0.20	0.26	0.98	0.59	72
	8	2.29	0.58	10,148	13,598	15,127	0.00	0.23	0.20	0.17	0.20	0.20	0.31	0.99	0.59	74
	9	2.14	0.50	10,818	13,289	14,582	0.00	0.26	0.20	0.18	0.19	0.20	0.28	1.00	0.58	73
	10	2.11	0.58	9,954	12,956	13,931	0.00	0.26	0.20	0.18	0.19	0.20	0.33	1.01	0.55	76
	11	2.33	0.75	9,984	12,686	13,440	0.23	0.58	0.20	0.18	0.20	0.20	0.33	1.01	0.49	75
	12	2.49	0.91	7,348	12,241	13,113	0.23	1.01	0.21	0.18	0.20	0.20	0.32	1.01	0.56	74
	13	2.95	1.22	7,203	11,853	12,511	0.25	1.92	0.21	0.19	0.20	0.20	0.29	0.99	0.50	74
	14	3.12	1.44	6,911	11,500	12,768	0.41	3.49	0.21	0.19	0.21	0.20	0.29	0.70	0.50	71
	15	3.63	1.68	8,259	11,284	19,996	0.64	4.66	0.21	0.19	0.22	0.20	0.28	0.26	0.50	70
	16	3.25	1.31	21,503	11,923	27,311	0.49	3.68	0.21	0.20	0.21	0.20	0.32	0.31	0.58	65
	17	2.92	1.08	27,792	12,856	35,633	0.42	2.73	0.21	0.20	0.21	0.20	0.34	0.42	0.62	65
	18	2.47	0.64	37,266	14,212	35,109	0.37	1.62	0.20	0.20	0.22	0.20	0.33	0.52	0.61	62
	19	2.32	0.65	36,710	15,396	31,807	0.34	0.54	0.19	0.20	0.22	0.21	0.32	0.63	0.63	65
	20	2.43	0.54	32,411	16,247	27,604	0.28	0.41	0.18	0.20	0.22	0.21	0.32	0.72	0.57	65
	21	2.48	0.41	22,950	16,566	23,014	0.26	0.34	0.17	0.20	0.22	0.21	0.35	0.78	0.60	65
	22	2.70	0.54	19,746	16,711	20,539	0.24	0.32	0.16	0.20	0.21	0.21	0.35	0.80	0.59	69
	23	2.83	0.66	15,744	16,669	19,237	0.27	0.32	0.17	0.20	0.22	0.21	0.41	0.00	0.63	69
	24	2.73	0.68	15,178	16,607	18,323	0.27	0.33	0.18	0.19	0.22	0.21	0.39	0.00	0.61	70
	25	2.31	0.56	14,020	16,503	18,385	0.26	0.27	0.19	0.19	0.22	0.21	0.38	1.53	0.61	71
	26	2.28	0.60	13,410	16,384	17,988	0.26	0.26	0.19	0.19	0.22	0.22	0.32	0.85	0.56	72
	27	2.05	0.44	12,944	16,257	17,175	0.25	0.24	0.20	0.19	0.23	0.22	0.30	0.87	0.56	72
	28	1.97	0.25	12,205	16,112	17,790	0.26	0.23	0.20	0.19	0.23	0.22	0.29	0.88	0.58	74
	29	1.99	0.31	11,826	15,964	18,676	0.24	0.28	0.20	0.19	0.23	0.22	0.33	0.86	0.62	75
	30	2.00	0.33	13,151	15,871	17,538	0.25	0.37	0.20	0.19	0.22	0.22	0.29	0.89	0.56	76
	31	2.19	0.62	12,579	15,764	16,084	0.26	0.61	0.20	0.19	0.23	0.22	0.27	0.89	0.54	72

Clifton Court Cl(mg/l)=200X EC - 25

e = Estimated

N.R. = No Record.

N.C. = Not computed due to insufficient data.

f = Excess Delta conditions with fish concerns.

r = Excess delta conditions with export/inflow ratio concerns.

s = Balanced water conditions with storage withdrawals.

dm = Daily Mean

md = Mean Daily

Table 34. Pesticides, Herbicides, and Other Organic Substances Detected In the SWP

March 2003

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant	March 19, 2003	Diuron	0.89
California Aqueduct At Banks Pumping Plant	March 19, 2003	Diuron	1.1
O'Niell Forebay Outlet Check 13	March 18, 2003	Diuron	3.2
Delta Mendota Canal At McCabe Road	March 18, 2003 March 18, 2003	Pentachlorophenol (PCP) Diuron	0.1 1
California Aqueduct Near Kettleman City (Check 21)	March 18, 2003	Diuron	1.5
California Aqueduct At Tehachapi Afterbay (Check 41)	March 19, 2003	Diuron	2.1

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

Table 35. Oroville and Delta Field Divisions Energy Data

(in kWh)

March 2003

Date	Oroville Thermalito Complex		Barker Slough Pumping Plant	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Generation	Load			Total Load	SWP Load		
1	4,247,424	2,880	10,703	25,767	4,245,120	4,245,120	291,135	244
2	1,378,656	8,640	10,206	24,850	4,004,160	4,004,160	291,905	179
3	3,086,784	3,168	11,578	25,963	4,008,192	4,008,192	290,540	374
4	3,224,160	4,320	11,718	25,718	4,037,760	4,037,760	326,595	354
5	4,065,120	3,744	10,234	23,142	4,025,088	4,025,088	336,620	372
6	2,325,024	4,608	10,654	23,821	4,044,096	4,044,096	339,090	276
7	1,530,432	3,744	12,628	27,083	4,013,760	4,013,760	348,225	126
8	415,584	5,184	10,843	25,284	3,309,504	3,309,504	334,010	407
9	935,136	8,640	11,123	26,915	3,034,368	3,034,368	341,450	181
10	390,240	8,640	11,578	26,684	3,015,360	3,015,360	331,060	348
11	321,408	7,776	12,271	27,573	2,389,632	2,389,632	292,695	435
12	952,992	6,336	12,194	27,538	3,413,568	3,413,568	329,875	3,818
13	2,364,480	4,320	12,593	27,608	3,335,232	3,335,232	405,680	13,194
14	2,336,832	3,744	12,061	26,509	3,115,968	3,115,968	402,475	13,513
15	112,896	712,512	10,983	24,514	2,966,208	2,966,208	395,480	13,491
16	337,824	9,216	9,163	22,435	2,705,472	2,705,472	403,200	13,465
17	1,568,160	7,488	11,998	26,376	3,642,624	3,642,624	414,300	13,465
18	1,697,184	7,488	10,808	24,514	3,734,400	3,734,400	429,435	13,477
19	1,673,280	6,048	13,062	26,880	3,659,520	3,659,520	417,240	12,832
20	2,345,184	4,896	11,172	24,528	3,651,264	3,651,264	410,560	11,794
21	1,456,704	4,032	12,313	25,319	3,456,960	3,456,960	416,405	10,884
22	2,610,144	3,456	10,871	25,529	2,855,616	2,855,616	414,880	11,327
23	158,400	2,299,392	9,828	24,507	3,796,608	3,796,608	416,710	11,686
24	30,528	3,193,056	12,257	27,230	3,670,272	3,670,272	425,370	11,686
25	1,648,800	1,670,400	12,579	26,327	3,667,584	3,667,584	425,615	12,137
26	1,455,264	1,921,824	11,571	25,256	3,653,376	3,653,376	414,800	12,341
27	2,165,760	1,894,464	12,985	27,370	3,680,640	3,680,640	418,130	11,414
28	1,471,104	10,656	12,873	28,896	3,656,064	3,656,064	415,455	8,567
29	1,106,208	0	11,935	27,699	3,404,160	3,404,160	414,130	7,740
30	571,968	3,964,320	12,782	32,025	3,605,568	3,605,568	413,275	7,721
31	1,916,928	0	14,623	34,678	2,986,752	2,986,752	411,620	5,811
Total	49,900,608	15,784,992	362,187	818,538	108,784,896	108,784,896	11,717,960	223,659

Table 36. San Luis Field Division Energy Data

(in kWh)

March 2003

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	1,121,904	734,904	672,768	672,768	2,556,576	1,602,576
2	1,521,216	1,137,216	0	0	4,559,904	1,007,904
3	911,808	524,808	0	0	2,247,840	915,840
4	995,472	608,472	0	0	3,874,464	2,542,464
5	1,103,616	758,616	0	0	4,105,728	2,773,728
6	1,226,304	881,304	0	0	4,330,656	2,900,656
7	1,161,216	816,216	0	0	3,422,880	2,072,880
8	1,300,320	955,320	0	0	2,081,088	731,088
9	1,665,936	1,329,936	0	0	4,390,272	-25,728
10	1,137,456	792,456	0	0	1,863,936	207,936
11	1,174,896	829,896	0	0	2,371,968	715,968
12	1,580,544	1,235,544	0	0	2,066,400	123,400
13	1,371,168	1,026,168	0	0	1,596,672	12,672
14	1,417,248	1,072,248	0	0	1,984,320	49,320
15	1,280,880	935,880	514,368	514,368	1,867,968	10,968
16	1,160,208	824,208	0	0	4,591,872	367,872
17	1,084,320	739,320	0	0	1,696,896	190,896
18	952,704	607,704	0	0	5,182,848	3,598,848
19	1,068,480	723,480	0	0	4,628,448	3,298,448
20	1,283,904	1,010,904	0	0	2,836,224	1,252,224
21	1,134,576	861,576	0	0	3,322,080	1,918,080
22	669,024	396,024	0	0	4,647,456	3,171,456
23	980,208	716,208	0	0	6,339,168	3,075,168
24	886,320	613,320	0	0	5,197,536	3,649,536
25	994,176	721,176	0	0	4,474,656	3,250,656
26	1,305,216	918,216	0	0	4,171,680	2,947,680
27	1,635,120	1,248,120	0	0	2,834,784	1,782,784
28	2,180,592	1,793,592	0	0	2,054,304	974,304
29	2,840,256	2,453,256	1,250,496	1,250,496	1,100,448	20,448
30	2,479,536	2,095,536	561,600	561,600	1,951,488	19,488
31	2,330,928	1,943,928	869,472	869,472	1,215,360	-8,640
Total	41,955,552	31,305,552	3,868,704	3,868,704	99,565,920	45,150,920

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

Table 37. San Joaquin Field Division Pumping Plant Energy Load Data

(in kWh)

March 2003

Date	Coastal Branch					California Aqueduct			
	Las Perillas	Badger Hill	Devils Den	Bluestone	Polonio	Buena Vista	Teerink	Chrisman	Edmonston
1	13,992	37,872	43,542	41,184	44,694	1,232,424	1,360,296	3,038,112	11,296,800
2	13,794	36,552	39,024	36,648	40,374	1,710,936	1,837,512	4,182,048	15,466,320
3	14,204	36,088	29,556	27,036	28,800	928,080	1,011,240	2,246,400	8,213,760
4	16,398	43,384	38,322	36,954	39,690	1,093,248	1,145,592	2,628,576	9,704,880
5	11,870	30,648	29,178	27,396	29,736	1,291,464	1,421,568	3,188,160	11,935,440
6	11,424	29,464	45,342	41,688	46,296	1,218,456	1,314,432	2,919,456	10,827,360
7	14,136	36,520	31,320	30,780	33,678	1,250,928	1,349,424	3,015,648	11,167,920
8	14,712	40,008	42,210	39,600	42,102	1,452,168	1,633,032	3,668,544	13,671,360
9	11,144	28,360	42,984	39,510	43,686	1,985,040	2,140,776	4,811,904	18,096,480
10	10,770	28,352	25,344	24,462	25,542	1,228,248	1,419,336	3,104,352	11,530,800
11	16,528	45,360	43,524	40,860	43,902	1,323,864	1,459,728	3,224,736	11,700,720
12	14,470	37,920	37,242	35,604	38,790	1,279,656	1,352,736	2,975,616	11,017,440
13	14,222	38,840	46,224	43,632	47,358	1,480,680	1,617,840	3,584,448	13,037,760
14	14,984	40,184	55,926	53,856	56,646	1,552,248	1,672,416	3,680,640	13,551,120
15	10,956	31,256	70,722	67,140	70,776	1,530,360	1,700,568	3,809,088	14,016,960
16	9,292	23,608	62,982	58,680	63,900	1,913,760	2,144,376	4,822,848	18,144,000
17	14,830	37,800	44,226	42,714	45,504	1,348,416	1,478,304	3,266,784	12,111,840
18	27,812	71,928	63,702	60,426	63,270	1,232,712	1,382,544	3,096,576	11,347,200
19	28,628	74,000	67,572	63,972	68,580	1,259,928	1,389,744	3,118,176	11,309,760
20	25,942	66,912	65,772	62,586	65,088	1,272,600	1,456,128	3,267,648	11,851,200
21	23,570	62,264	62,244	58,950	62,226	1,084,824	1,229,616	2,706,624	9,916,560
22	25,886	68,304	64,602	61,776	65,268	166,536	211,608	456,768	1,491,840
23	22,628	57,448	90,036	85,842	90,198	1,207,800	1,240,056	2,759,616	10,165,680
24	20,194	51,528	56,862	53,496	57,330	756,792	880,488	1,959,552	7,150,320
25	28,762	75,728	73,692	70,038	72,612	1,028,664	1,111,824	2,478,240	8,866,800
26	33,574	89,632	90,414	88,056	89,676	1,318,536	1,474,920	3,315,456	12,177,360
27	34,454	89,584	81,108	77,418	79,740	1,957,896	2,144,808	4,804,128	17,777,520
28	29,696	80,152	83,358	79,344	83,016	1,895,616	2,033,208	4,559,040	16,582,320
29	43,642	113,368	79,740	77,040	78,768	1,844,064	2,067,192	4,643,424	17,071,920
30	41,572	108,368	100,782	94,770	101,088	1,948,464	2,122,272	4,735,296	17,634,240
31	28,664	72,600	65,916	63,036	66,690	1,839,960	2,089,224	4,654,368	17,179,200
Total	642,750	1,684,032	1,773,468	1,684,494	1,785,024	42,634,368	46,892,808	104,722,272	386,012,880

Table 38. Southern Field Division Energy Data

(in kWh)

March 2003

Date	West Branch			East Branch			
	Oso Pumping Plant Load	Warne Powerplant Generation	Castaic Powerplant SWP Generation	Alamo Powerplant Generation	Pearblossom Pumping Plant Load	Devil Canyon Powerplant Generation	Mojave Siphon Powerplant Generation
1	648,312	1,788,768	2,520,000	0	1,600,512	3,421,920	182,574
2	836,752	1,364,184	2,520,000	0	2,333,364	3,165,888	248,892
3	513,856	1,159,344	2,880,000	0	1,169,436	2,960,256	173,292
4	639,520	1,691,712	2,880,000	0	1,063,380	2,743,392	120,750
5	707,056	1,712,808	1,440,000	0	1,708,884	2,916,576	194,082
6	520,128	1,259,928	1,440,000	0	1,826,712	3,321,504	203,364
7	647,024	1,547,136	1,440,000	0	1,623,852	3,355,296	187,383
8	678,944	1,493,856	2,520,000	0	1,983,264	3,505,344	219,492
9	1,012,872	1,203,624	2,520,000	0	2,700,336	3,763,680	294,273
10	608,832	1,461,024	2,880,000	0	1,761,516	3,197,664	229,698
11	564,144	1,426,680	2,880,000	0	1,873,092	3,246,240	212,562
12	523,656	1,125,504	1,440,000	0	1,920,324	3,482,592	212,646
13	772,240	1,786,104	1,440,000	0	1,758,456	3,190,560	220,626
14	721,448	1,831,320	1,440,000	0	2,089,464	3,473,568	221,319
15	780,248	1,689,408	2,520,000	0	2,038,536	3,603,840	231,441
16	1,001,056	1,212,552	1,608,000	0	2,645,004	3,390,912	299,166
17	660,632	1,617,768	2,880,000	0	1,943,796	3,336,864	238,959
18	609,728	1,615,320	2,880,000	0	1,814,196	3,376,800	199,353
19	701,624	1,712,376	2,880,000	0	1,613,880	3,044,832	180,264
20	726,656	1,662,336	1,416,000	0	1,538,772	2,966,496	177,975
21	602,952	1,525,248	1,416,000	0	1,238,304	3,263,808	134,463
22	117,264	462,888	708,000	0	0	2,855,616	0
23	1,027,768	1,797,480	1,392,000	0	239,016	2,815,968	0
24	354,984	1,188,288	1,440,000	0	1,335,588	2,594,016	134,988
25	408,072	1,168,632	1,440,000	0	1,409,988	2,508,384	175,329
26	632,912	1,357,776	1,440,000	0	1,655,988	2,602,272	193,494
27	918,064	1,799,568	2,160,000	0	2,753,664	2,891,040	289,065
28	921,256	1,711,368	2,880,000	0	2,465,628	3,016,896	314,244
29	890,400	1,648,512	2,880,000	0	2,527,164	3,620,736	299,418
30	1,034,992	1,556,928	2,880,000	0	2,514,948	3,676,800	261,975
31	997,136	1,751,112	2,880,000	0	2,259,156	3,544,128	296,562
Total	21,780,528	46,329,552	65,940,000	0	55,406,220	98,853,888	6,347,649